

**General Framework and Plenary Keynote Speakers of the Collocated Conferences**

The 12<sup>th</sup> International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2021

The 12<sup>th</sup> International Conference on Society and Information Technologies: ICSIT 2021

The 11<sup>th</sup> Ibero-American Conference on Complexity, Informatics and Cybernetics

*Décima Primera Conferencia Iberoamericana de Complejidad, Informática y Cibernética: CICIC 2021*

***Virtual Conference based at Orlando Florida USA – March 9- 12, 2021***

**General Overview**

**Tuesday, March 9<sup>th</sup>, 2021:** Virtual Conversational Sessions. to foster inter-disciplinary Communication

- **Morning:** 8: 00 AM – 12:00 M, Virtual Conversational Sessions in English
- **Afternoon:** 12:00 M – 6:00 PM, Virtual Conversational Sessions in Spanish/Portuguese

**Wednesday, March 10<sup>th</sup>, 2021:**

- **Morning:** 8: 00 AM – 10:00 AM – Plenary Keynote Addresses  
10: 00 AM – 12:00 AM – Parallel Sessions for peer-reviewed presentations
- **Afternoon:** 1: 00 PM – 3:00 PM – Plenary Keynote Addresses  
3: 00 PM – 5:00 PM – Parallel Sessions for peer-reviewed presentations

**Thursday, March 11<sup>th</sup>, 2021:**

- **Morning:** 8: 00 AM – 10:00 AM – Plenary Keynote Addresses  
10: 00 AM – 12:00 AM – Parallel Sessions for peer-reviewed presentations
- **Afternoon:** 1: 00 PM – 3:00 PM – Plenary Keynote Addresses  
3: 00 PM – 5:00 PM – Parallel Sessions for peer-reviewed presentations

**Friday, March 12<sup>th</sup>, 2021:**

- **Morning:** 8: 00 AM – 10:00 AM – Plenary Keynote Addresses  
10: 00 AM – 12:00 AM – Parallel Sessions for peer-reviewed presentations
- **Afternoon:** 1: 00 PM – 3:00 PM – Plenary Keynote Addresses  
3: 00 PM – 5:00 PM – Parallel Sessions for peer-reviewed presentations

**General Framework and Plenary Keynote Speakers of the Collocated Conferences**  
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***Virtual Conference based at Orlando Florida USA – March 9- 12, 2021***

**CONVERSATIONAL SESSIONS/PARTICIPATIVE PANELS**

**Tuesday, March 9<sup>th</sup>, 2021. Morning**

**Time Zone: (GMT-5:00) Eastern Time (US and Canada)**

<b>Time slot</b>	<b>Hosts/Moderators</b>	<b>Trans-disciplinary Topic</b>
8:00 AM – 8:40 AM	Dr. Nicola Fabiano, Italy, Founder and CEO of Studio Legale Fabiano	<i>“Privacy and Cybersecurity”</i>
8:40 AM – 9:20 AM	Dr. Teresa Langness, USA, Nonprofit Board President at Full-Circle Learning,	<i>“Improving Life as a North Star for Research”</i>
9:20 AM – 10:00 AM	Dr. Jon K. Burmeister, USA, College of Mount St. Vincent, in New York City and Dr. Ziyuan Meng, USA, Drew University, New Jersey	<i>“Cybernetics and Philosophy”</i>
10:00 AM – 10:40 AM	Professor Andres Tremante, USA, Florida International University	<i>“A Program for Inter-Disciplinary Communication via trans-disciplinary topics in Engineering and Computing”</i>
10:40 AM – 11:20	Dr. Risa Blair, USA, Purdue University Global, School of General Education and Dr. Suzanne Lunsford, USA, Wright State University, Professor of Chemistry,	<i>“Online Education and Communication: COVID-19 - the Elephant in the Room”</i>
11:20 AM – 12:00	Ms. Alina Chiriac (Matei), MSc. and Doctoral Student, Romania, University of Economic Studies in Bucharest	<i>Fraud, A Multidisciplinary Element</i>

## Tuesday, March 9<sup>th</sup>, 2021, Afternoon

**Time Zone: (GMT-5:00) Eastern Time (US and Canada)**

*Afternoon: Spanish/Portuguese*

<b>Período de Tiempo</b>	<b>Hosts/moderadores</b>	<b>Tópico Trans-Disciplinario</b>
12:00 M – 12:40 PM	Dra. Elena Fabiola Ruiz Ledesma, México, Instituto Politécnico Nacional	<i>"El papel de la tecnología en los sectores: Educativo, económico y científico durante la pandemia por COVID-19"</i>
12:40 M – 1:20 PM	Profesor Andrés Tremante. USA, Florida International University	<i>"Un Programa de Comunicación Interdisciplinaria a través de temas trans-disciplinarios en Ingeniería y Computación"</i>
1:20 PM – 2:00 PM	Profesor Abel Suing, Ecuador, Universidad Técnica Particular de Loja (UTPL)	<i>"Ética y regulación en la sociedad del conocimiento"</i>
2:00 PM – 2:40 PM	Profesora Ariana Acón Matamoros y Dra. Aurora Trujillo Cotera Costa Rica, Universidad Estatal a Distancia	<i>"El papel de la tecnología en los Educación Superior"</i>
2:40 PM – 3:20 PM	Profesora Liliana González Palacio, Colombia, Universidad de Medellín e Ing. César Fabián Cadavid Grajales, Colombia, Consejo Profesional Nacional de Ingeniería	<i>"La ética profesional en el ejercicio de la ingeniería"</i>
3:20 PM – 4:00 PM	Dra. Karina Valarezo, Dra. Andrea Velásquez y Dra. Fanny Paladines. Ecuador, Universidad Técnica Particular de Loja	<i>"Desarrollo Sostenible y Comunicación Digital Estratégica"</i>
4:00 PM – 4:40 PM	Victoria Eugenia Ospina Becerra, Colombia, Escuela Colombiana de Ingeniería Julio Garavito	<i>"Ciudades Inteligentes"</i>
4:40 PM – 5:20 PM	Dra. Bertha Ulloa Rubio, Perú, Universidad César Vallejo	<i>"Tendencias de la Universidad del futuro"</i>
5:20 PM – 6:00 PM	Prof Dr Eduardo Moresi, Brazil, Universidade Católica de Brasília	<i>Bibliometria, cientometria e interdisciplinaridade</i>

## PLENARY KEYNOTE ADDRESSES

Wednesday, March 10<sup>th</sup>, 2021

Time Zone: (GMT-5:00) Eastern Time (US and Canada)

Time Slot	Plenary Keynote Speakers	Plenary Keynote Addresses
8:00 AM – 8:40 AM	Professor Shigehiro Hashimoto, Japan, Kogakuin University, Dean, Faculty of Engineering	<i>“Does Leaning Multidisciplinary Field of Biomedical Engineering Help Pandemic of COVID-19?”</i>
8:40 AM – 9:20 AM	Dr. Nicola Fabiano., Italy, Founder and CEO of Studio Legale Fabiano,	<i>“The paradox of adequate privacy for minors on online digital platforms: waiting for Godot”</i>
9:20 AM – 10:00 AM	Dr. Rusudan Makhachashvili, Ukraine, Borys Grinchenko Kyiv University and Professor Ivan Semenist, Ukraine, Borys Grinchenko Kyiv University	<i>“Interdisciplinarity and Universality of Foreign Languages Education”</i>
1:00 PM – 1:40 PM	Professor Allan Tarp. Denmark, MATHeCADEMY.net	<i>“Teaching Mathematics as Communication, Trigonometry Comes Before Geometry, and Probably Makes Every Other Boy an Excited Engineer.”</i>
1:40 PM – 2:20 PM	Professor Haniph A. Latchman USA/Jamaica, University of Florida, and <i>and</i> Dr Maurice McNaughton, Jamaica, The University Of The West Indies – Mona,	<i>“Bridging the Persistent Digital Divide”</i>
2:20 PM – 3:00 PM	Dr. Wayne Patterson USA, Howard University	<i>“Introducing Behavioral Cybersecurity”</i>

## **PLENARY KEYNOTE ADDRESSES**

**Thursday 11<sup>th</sup>, 2021**

**Time Zone: (GMT-5:00) Eastern Time (US and Canada)**

<b>Time Slot</b>	<b>Plenary Keynote Speakers</b>	<b>Plenary Keynote Addresses</b>
8:00 AM – 8:40 AM	Dr. Areej ElSayary, United Arab Emirates, Zayed University, Abu Dhabi	<i>“Using Applied Technology to Enable Active Learning Environment: An Era of Online Learning”</i>
8:40 AM – 9:20 AM	Dr. Ekaterini Nikolarea, Greece, University of The Aegean	<i>“International Conferences: Topoi of inter-disciplinary communication or a break-down of it?”</i>
9:20 AM – 10:00 AM	Dr. Patrick Mennig, Germany, Fraunhofer IESE Dept. User Experience und Requirements Engineering	<i>“Many Talents is no Talent: Creativity and Virtual Collaboration”</i>
1:00 PM – 1:40 PM	Dr. Teresa Langness, USA, Nonprofit Board President at Full-Circle Learning	<i>‘Improving Life’ as a North Star for Research”</i>
1:40 PM – 2:20 PM	Professor Emeritus Thomas Marlowe, USA, Seton Hall University,	<i>“Implicit Cybernetic Systems—A Controlling Metaphor, or a Metaphor Out of Control?”</i>
2:20 PM – 3:00 PM	Professor Grandon Gill	<i>“The Predatory Journal: Victimizer or Victim”</i>

## PLENARY KEYNOTE ADDRESSES

**Friday 12<sup>th</sup>, 2010**

**Time Zone: (GMT-5:00) Eastern Time (US and Canada)**

<b>Time Slot</b>	<b>Plenary Keynote Speakers</b>	<b>Plenary Keynote Addresses</b>
8:00 AM – 8:40 AM	Dr. Yuriy Mikheev, Russia, Saint Petersburg State University	<i>“Cognition follows from entropy increasing and world complexity”</i>
8:40 AM – 9:20 AM	Dr. Adrian Leka, Albania “Luigj Gurakuqi” University of Shkoder	<i>“Legal education as support for democracies”</i>
9:20 AM – 10:00 AM	Professor Stefano Follesa, Ms. Sabrina Cesaretti, Italy, University of Florence and Dr. Francesco Armato, Florence Research Institute Design Art	<i>“Issues of form”</i>
1:00 PM – 1:40 PM	Dr. Risa Blair, USA, Purdue University Global	<i>“Online Education and Communication”</i>
1:40 PM – 2:20 PM	Dr. Risa Blair, USA, Purdue University Global, Dr. Nagib Callaos, USA, Founding president of the IIIS, and Dr. Jeremy Horne, President- emeritus of the Southwest Area Division, American Association for the Advancement of Science (AAAS)	<i>Plenary Conversational Session on Ethical and Meta-Ethical Issues of Peer Reviewing</i>
2:20 PM – 3:00 PM	Dr. Jeremy Horne, USA, President-emeritus of the Southwest Area Division, American Association for the Advancement of Science (AAAS)	<i>“Zero Is Greater Than One”</i>

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***Plenary Keynote Addresses – Wednesday, March 10<sup>th</sup>, 2021***

**8:00 AM – 8:40 AM**



**Professor Shigehiro Hashimoto**, Japan, Kogakuin University, Dean, Faculty of Engineering, Former Associate to the President, Doctor of Engineering and Doctor of Medicine, Research Area: Biomedical Engineering

**Professor Shigehiro Hashimoto** is a professor of Biomedical Engineering, and Dean of the Faculty of Engineering of Kogakuin University, Tokyo, Japan. He got his Bachelor of Engineering in Mechanical Physics (1979), and Master of Engineering at Tokyo Institute of Technology (1981), Tokyo, Doctor of Medicine at Kitasato University (1987), Sagamihara, and Doctor of Engineering at Tokyo Institute of Technology (1990), Tokyo. He was Research Associate in School of Medicine (1981-1989), and Assistant Professor in School of Medicine (1989-1994), at Kitasato University, Associate Professor in the Department of Electronics (1994-2001), and Professor at Osaka Institute of Technology (2001-2011). He also was the Creator of the first Department of Biomedical Engineering in Japan at Osaka Institute of Technology (2005) and Director of its Medical Engineering Research Center (2005-2011). He was Associate to President and Dean of Admissions Center at Kogakuin University, Tokyo (2012-2018). He experienced internship in Research Center for Artificial Heart in Free University in Berlin (1977). He is the author of the books of “Introduction to Biosystems Engineering (1996)”, “Introduction to Biomedical Measurement Engineering (2000)”, and “Introduction to Biomechanical Engineering (2013)”. His present researches focus on bio-cellular mechanics using micromachined flow channel. shashimoto@cc.kogakuin.ac.jp  
<http://www.mech.kogakuin.ac.jp/labs/bio/>

**Plenary Keynote Address: “Does Leaning Multidisciplinary Field of Biomedical Engineering Help Pandemic of COVID-19?”**

**Abstract:** The global community has accelerated the spread of the virus. Medicine alone cannot solve the pandemic. The transformation of social life by new technology helps to coexist with viruses. The academic field has been divided into each specialized field. The communication tools (internet, and database), on the other hand, are developing multidisciplinary academic fields. “Multidisciplinary field” is not just collection of fields, but a fusion between fields. Many problems in the global society cannot be solved by the single disciplinarian, but are waiting for the multidisciplinarian. For students, it is not easy to find the way how to learn multidisciplinary field: curriculum, textbook, learning team, and teacher (adviser). “Biomedical Engineering” is

one of the multidisciplinary fields, which have many related fields: Biology, Medicine, Informatics, and Engineering. The topic includes case studies related to COVID-19 (education for freshman, undergraduate, master and doctor courses) based on author's experiences: from cross cultural to symbiosys.

Keywords: Multidisciplinary Field, Learning, Biomedical Engineering, COVID-19, Communication and Students.

### **8:40 AM – 9:20 AM**



**Dr. Nicola Fabiano**, Italy, Founder and CEO of Studio Legale Fabiano, President of the first San Marino Data Protection Authority

Nicola Fabiano, Lawyer, Council of Italian High Court, Civil Law Specialist, expert and advisor for Data Protection, Privacy and Cyber Security, Independent researcher, Innovator. Nicola is a frequent speaker at international conferences on data protection, privacy, Cyber Security, IoT, Blockchain, publishing articles, essays, books, papers. In 1994 Nicola founded Studio Legale Fabiano. From November 2017 to April 2018, Government advisor of the Republic of San Marino for the drafting of the data protection legislation. On January 2019, Nicola has been appointed as President of the first San Marino Data Protection Authority. Member of the "IEEE SA P7007 Ontological Standard for Ethically Driven Robotics and Automation Systems Working Group" and chair of the "Data Privacy and Protection" sub-group. Member of the Working Group of the FIIF (Fondazione Italiana per l'Innovazione Forense – Italian Foundation for the Forensic Innovation) of the Italian CNF (Consiglio Nazionale Forense – Italian National Bar Council).

**Plenary Keynote Address:** *“The paradox of adequate privacy for minors on online digital platforms: waiting for Godot”*

**Abstract:** The issue of privacy for minors using online services, including basically (but not limited to) social networks and messaging systems, has been known since the Internet became more widespread with the first online resources in the late 1990s.

In particular, while in 1998, the USA approved the Children's Online Privacy Protection Act (COPPA) - which came into force on 21/4/2000. In Europe, with Decision n. 276/1999/CE of 25/1/1999, a multi-year Community action plan was adopted to promote the safe use of the Internet through the fight against illegal and harmful content information spread through global networks (**Safer Internet**). Therefore, the issue concerning the protection of minors in the face of Internet risks is an old one. How to deal with privacy issues? However, it is clear that when we talk about minors, we cannot refer exclusively to the positive legal system. The family, the primary nucleus of society, is the context within which minors relate to their parents who exercise parental responsibility: the latter are required to exercise control - albeit of a general nature - over their children, without, however, interfering with their intimate sphere, to which they are still entitled. The issue, as described, appears simple, but in reality, it is not at all so because it is complicated to check the actual age and, even more, the true identity of the person who asks for access to an online resource. The point is digital identity: just as in the real world, it

is necessary to identify a person; in the same way, in virtual reality, it should be possible to do the same.

**9:20 AM – 10:00 AM**



**Professor Rusudan Makhachashvili**, Ukraine, Borys Grinchenko Kyiv University, Head of Romance Languages and Typology Department

**Professor Rusudan Makhachashvili** is Doctor Habilitated, English and Spanish major, Head of Romance Languages and Typology Department of Borys Grinchenko Kiyv University, Ukraine. Editor in Chief of the Journal “Synopsis: Text. Context. Media”. Main academic interests: interdisciplinary studies in Liberal Arts, digital education, digital humanities, digital literacy development, cognitive and communicative linguistics. European Commission Horizon 2020 Grant Evaluation Expert. Exemplary published works:

Linguophilosophic Parameters of English Innovations in Technosphere (UK 2015), Models and Digital Diagnostics Tools for the Innovative Polylingual Logosphere of Computer Being Dynamics (Peter Lang, Berlin, 2020), ICT Tools and Practices for Final Qualification Assessment in the Framework of COVID-19 Lockdown (Poland, 2020).



**Professor Ivan Semenist**, Ukraine, Borys Grinchenko Kyiv University, Head of Oriental Languages and Translation Department

**Professor Ivan Semenist**, PhD, is Orientologist, Head of Oriental Languages and Translation Department, Head of Ukrainian National Association of Teachers of Chinese, Borys Grinchenko Kiyv University, Ukraine. Editor in Chief of Ukrainian Journal of Sinology Studies. Main academic interests: oriental studies, interdisciplinary studies in Liberal Arts, oriental languages, cultural and linguistic-literary ties of Ukraine with the countries of the East, relations of Ukraine with the countries of the East. Exemplary published works: Modern Chinese

Society -New Perspectives: New research between China and Ukraine scientists (Social Sciences Academic Press, China 2017), Japan's New Role In The World: The Discussion Of Early 1990's (Ukraine 2016), ICT Tools and Practices for Final Qualification Assessment in the Framework of COVID-19 Lockdown (Poland, 2020).

**Plenary Keynote Address: “*Interdisciplinarity and Universality of Foreign Languages Education*”**

**Abstract:** Transformative shifts in the knowledge economy of the XXI century, Industry 4.0 development and elaboration of networked society, emergency digitization due to quarantine measures has imposed pressing revisions onto interdisciplinary and cross-sectorial job market demands of Liberal Arts university graduates’ skillsets, upon entering the workforce. This, in turn, stipulates reevaluation of the interdisciplinary approaches to comprehensive professional competences in foreign languages acquisition and application.

The study of groundwork principles of universality and interdisciplinary of Foreign languages professional training and linguistic education in general is a parcel of the framework project *TRANSITION: Transformation, Network, Society and Education*. The inquiry main findings disclose: assessment of interdisciplinary and universal skills, crucial for successful professional development overall; systematization and assessment of interdisciplinary and custom professional skills, enhanced by higher linguistic education; evaluation of a linguistic training universality/versatility by stakeholders; estimation of a linguistic training interdisciplinarity by stakeholders; core professional values a linguistic education can help actualize; cross-sectorial and interdisciplinary social spheres estimated most accommodating or lucrative for a foreign languages education skillset; estimated needs and avenues of interdisciplinary upskilling or retraining by Foreign Languages majors to meet dynamic job market requirements in the XXI century.

### **1:00 PM – 1:40 PM**



**Professor Allan Tarp**, Denmark, MATHeCADEMY.net

Inspired by the two Enlightenment republics, Professor Allan Tarp has designed the research paradigm ‘Difference Research’ mixing French skepticism and American pragmatism, and aiming at uncovering differences that make a difference. Designing and testing micro-curricula allows using the Grounded Theory similarity with Piagetian adaptation to find means to the real educational goal, ‘Mastery of Many’.

In his macro-study, ‘Cinderella Mathematics’, he shows how losers become users by replacing mediated ‘meta-math’ presenting concepts top-down as examples from abstractions with grounded ‘many-math’ presenting concepts bottom-up as abstractions from examples. Thus, where few understand abstract linear and exponential functions, all understand change by adding and by multiplying.

‘An ICME Trilogy’ contains many of his micro-studies presented at the ICME conferences in 2004, 2008 and 2012. Examples are ‘One Digit Mathematics’, and ‘PerNumber Calculus’. The yearly booklet ‘Math Ed & Research’ contains his work from 2017 to 2020. His curriculum designs are also published in several MrAITarp YouTube videos.

Inspired by children’s own number-language, he designed the self-instructing web-based

MATHeCADEMY.net teaching teachers teach mathematics as ‘many-math’, a natural science about the physical facts, many, needing only two basic competences, to COUNT and to ADD in Time and in Space, the CATS approach to mathematics.

**Plenary Keynote Address:** *“Teaching Mathematics as Communication, Trigonometry Comes Before Geometry, and Probably Makes Every Other Boy an Excited Engineer.”*

**Abstract:** Before 1970, foreign language and mathematics both were hard to learn because the two taught grammar before language. Then a turn took place in foreign language education allowing students to learn it through communication. Mathematics education never had a similar turn, so it is still hard to many. Therefore, we should ask if it is possible to also learn mathematics as communication.

We see that three different kinds of mathematics exist, pre-setcentric in North America, setcentric in most of the world, and post-setcentric among children communicating about the physical facts, many with two-dimensional box- and bundle-numbers with units.

Thus, instead of being rejected, the children own number-language should be uncovered and developed, allowing bundle-counting to grow into a 'recount-formula' where  $8 = (8/2)*2$  becomes  $T = (T/B)*B$  expressing the proportionality that is used all over STEM. And, allowing box-counting to grow into trigonometry when mutual recounting the three sides in a box halved by its diagonal.

So, being taught by children, we realize that indeed core mathematics can be learned narratively as communication about totals, described outside as boxes and inside as bundles.

#### **1:40 PM – 2:20 PM**



**Dr. Haniph A. Latchman**, USA/Jamaica, University of Florida, The Department of Electrical & Computer Engineering at the University of Florida. Head of The Laboratory for Information Systems & Telecommunications (LIST, Inter-disciplinary Research Group) and *The University of the West Indies (Mona)*.

**Dr. Haniph A. Latchman** received the D.Phil. in Engineering from Oxford University in 1986 and the B.Sc. degree (1<sup>st</sup>-Class Honors) from the University of The West Indies (UWI), Trinidad and Tobago, in 1981. He was the 1978 recipient of the UWI Open Scholarship and the Jamaica Rhodes Scholar in 1983. From 1981-1986 Dr. Latchman worked as a Transmission Engineer for the Jamaica Telephone Company (now Cable and Wireless / Flow), and completed his doctoral studies in Oxford in 1986. Dr. Latchman then accepted a position at the University of Florida as Professor in Electrical and Computer Engineering where he built a research and teaching program focused on multimedia wireless and powerline communications and networks as well as on multivariable and robust control system design. Dr. Latchman also became actively involved in the use of computer, communication and information technology to enhance the learning experience for traditional on-campus students as well as in distance education. He is a Senior Member of the IEEE and has published some 200 technical journal articles, conference proceedings, and 4 books in the general areas of Communication Networks, Control Systems and Technology-Enhanced Education. He has directed 26 Ph.D. dissertations and 39 MS theses and has served as Associate Editor and guest editor for several international journals, and as General Chair and member of technical program committees in the areas of communications and control systems and networks. Dr. Latchman's work has been recognized by numerous awards, including several Best Paper awards, multiple University of Florida teaching and research

awards and the IEEE Undergraduate Teaching Award, as well as Life Membership in the University Of Florida Academy Of Distinguished Teaching Scholars. Dr. Latchman was appointed Professor Emeritus at the University of Florida in 2016 and since then has been Professor in the Faculty of Engineering at his Alma Mater, the University of the West Indies (Mona), in Kingston, Jamaica.



**Dr Maurice McNaughton**, Jamaica, The University Of The West Indies – Mona, Director of the Centre for IT-enabled Innovation at the Mona School of Business & Management, UWI.

**Dr Maurice McNaughton** holds a PhD in Decision Sciences at Georgia State University and has over 25 years senior management and leadership experience in the planning and direction of enterprise-level Information Technology in organizations. He is currently Director of the Centre for IT-enabled Innovation at the Mona School of Business & Management, UWI.

Dr McNaughton serves on several Boards in the public and private sectors including, Chairman of the National Information Systems for Health Steering Committee, the Board of Directors of Victoria Mutual Building Society, and the Board of Commissioners of the Overseas Examinations Commission. He is a member of the recently convened COVID-19 National Research Agenda Steering Committee and chairs the Data Management and Documentation Working Group that provides cross-cutting support to the various research working groups, relating to data/information management and documentation.

Dr McNaughton’s research interest spans the domain of emerging Open ICT ecosystems and Digitalization and integrates extensive industry experience with focused academic research about the strategic use of ICTs as an enabler of business innovation in small and large enterprises, as well as a growth-enabler for developing economies. He is a founding member of the Caribbean Open Institute, a regional coalition of Caribbean organizations that engages and works with regional governments, researchers, journalists, technologists, NGOs, and academics, to raise awareness, strengthen capacity, and foster collaborations towards the adoption of open development approaches.

**Plenary Keynote Address: “*Bridging the Persistent Digital Divide*”**

**Abstract:** The global explosion in the deployment of advanced Internet-based communication services and particularly of videoconferencing, over the past year has unquestionably been extraordinary. Yet, it is a sad fact that these technological advancements have widened the digital divide for a large sector of the global community caused, among other things, by restrictive legacy regulations and the limited availability and high cost of Internet connectivity and bandwidth. These marginalization effects are particularly far-reaching in the education sectors, as local communities in resource-constrained developing contexts struggle to respond to the challenges of on-line teaching and learning forced by the physical restrictions of the global pandemic. The integration of customized solutions from a range of readily available open-source platforms and tools offer the promise of delivering low-cost accessible solutions that are appropriate for these contexts.

This presentation will consider how the use of low cost IP-based telecommunication and videoconferencing systems based on Session Initiation Protocol (SIP) and Web Real Time Communication (WebRTC) standards, address some of these issues. We will first examine personal, commercial and education applications of one-to-one, customized SIP-based audio and video communication services. A scalable system will be described that provides all the features present in commercial IP-PBX systems, yet is based entirely on open-source software and that has very modest hardware and bandwidth requirements. Then a customized open-source WebRTC multiparty videoconferencing system will be described that provide all the key features of popular commercial videoconferencing systems but can be owned and operated at very low cost, personally or by business enterprises of varying sizes, and by a range of educational institutions.

We will also demonstrate how an innovative integration of SIP and WebRTC as well as Internet video and audio streaming, effectively serve to bridge the persisting digital divide, enabling affordable access for underserved communities around the world, to the much needed global telecommunication and videoconferencing services.

Keywords: SIP, WebRTC, Customized Open source, Audio and Video Streaming

### **2:20 PM – 3:00 PM**



**Dr. Wayne Patterson**, USA, Howard University, Retired Professor, Former Director of the Cybersecurity Research Center and Former Associate Vice Provost for Research

**Dr. Wayne Patterson** is a retired Professor of Computer Science at Howard University. He has also been Director of the Cybersecurity Research Center, Associate Vice Provost for Research, and Senior Fellow for Research and International Affairs in the Graduate School at Howard. He has also been Professeur d'Informatique at the Université de Moncton, Chair of the Department of Computer Science at the University of New Orleans, and in 1988 Associate Vice Chancellor for Research there. In 1993, he was appointed Vice President for Research and Dean of the Graduate School at the College of Charleston, South Carolina. In 1998, he was selected by the Council of Graduate Schools, the national organization of graduate deans and graduate schools, as the Dean in Residence at the national office in Washington, DC, and he was subsequently elected to its Board of Directors. Dr. Patterson has published more than 60 scholarly articles primarily related to cybersecurity, and a leading textbook, *Behavioral Cybersecurity* (CRC Press, 2019). He has been the principal investigator on over 35 external grants valued at over \$6,000,000. From 2006-9, he was loaned by Howard University to the US National Science Foundation to serve as Program Manager for International Science and Engineering in Developing Countries, and in 2017 was Visiting Scholar at Google.

He holds degrees from the University of Toronto, University of New Brunswick and the PhD from the University of Michigan. He also held Post-Doctoral appointments at Princeton University and the University of California – Berkeley.

***Plenary Keynote Address: “Introducing Behavioral Cybersecurity”***

**Abstract:** For close to 40 years, my research has focused on the need for an accelerated development of research to address the problems of cyberattacks. I eventually realized that in addition to the traditional expertise required in studying such problems—that is, expertise in computer science, mathematics, and engineering—we also have a great need to address the human behavior, in the first place, of persons involved in cyberattacks or cybercrime of many forms, but also in the behavioral aspects of all computer users, for example, those who would never avoid precautions in their life such as locking their doors, but use the name of their significant other, sibling, or pet as a password on their computer accounts.

As a result, I have embarked on this initiative in order to introduce into the field an approach to cybersecurity that relies upon not only the mathematical, computing, and engineering approaches but also depends upon a greater understanding of human behavior. We have chosen to call this subject area “Behavioral Cybersecurity” and have developed and offered research contributions and a curriculum over the past several years that now has evolved into our “Behavioral Cybersecurity” textbook (with Dr. Cynthia Winston), which we hope will serve as a guidepost for universities, government, industry, and others that wish to develop scholarship in this area.

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***Plenary Keynote Addresses – Thursday, March 11<sup>th</sup>, 2021***

**8:00 AM – 8:40 AM**



**Dr. Areej ElSayary**, *United Arab Emirates, Zayed University, Abu Dhabi, Assistant Professor, Education Studies*

**Dr. Areej ElSayary** completed her Ph.D in Educational Management, Leadership and Policy. Her master's degree was in Science Education with specialization in STEM education, The British University in Dubai. She is currently an Assistant Professor at the College of Education at Zayed University. She has 12 years' experience, with specific expertise in Science, Technology, Engineering, Art and Mathematics (STEAM), curriculum design and development, teaching and learning, assessment, and schools accreditation. Prior to joining Zayed University, she was working as a curriculum advisor at the Al Arabia for Education Company leading the curricula implementation in all Al Itihad schools across UAE. She was also an Adjunct Faculty at the American University in Emirates with focus on the evaluation of different educational programs.

Dr Areej is an Approved Accreditation Visitor from New England Association of School and Colleges NEASC & Council of International School CIS. Her research interests include the cognitive development, Interdisciplinary STE(A)M curriculum, instructional design and educational technology. She has published her work internationally and has presented papers at different conferences. She has an active research agenda and collaborates internationally on creative research projects.

**Plenary Keynote Address:** *“Using Applied Technology to Enable Active Learning Environment: An Era of Online Learning”*

**Abstract:** Due to the lockdown caused by the COVID-19, millions of workers have experienced changes that transformed their lives, well-being, and productivity that impacted economies and labor markets. Many questions were raised about the use of technology needed, modern communication, and online learning. Will we have the same jobs after ten or twenty years? What competencies are needed for the demands of the new jobs that do not yet exist? What will learning look like after COVID-19? How can students' cognitive, social and emotional skills be developed? How can students' engagement in online learning be enhanced? How can teaching and learning presence be promoted in online learning?

Developing and enhancing learners' knowledge and skills are key drivers to produce quality, skillful workers with adequate employability skills. The global shift to a future of work is defined by an ever-expanding cohort of new technologies that are more interconnected where information and knowledge are widely spread. Applied technology is considered an effective tool to facilitate the teaching and learning process to create an active learning environment in an era of online and blended learning. The purpose of this presentation is to discuss the elements of organizing an active learning environment using applied technology to include the following: learning sciences and teamwork, communication and creation, personalization of learning, critical thinking, and real-world engagement. Accordingly, this will lead to the development of learners' digital competencies that prepare skilled workers for the new market needs.

### **8:40 AM – 9:20 AM**



**Dr. Ekaterini Nikolarea**, Greece, University of The Aegean, Lesvos, School of Social Sciences, Department of Geography.

**Dr. Ekaterini Nikolarea** got her BA in English Studies from Greece and her MA and PhD in Comparative Literature from Canada. She was awarded major Canadian Fellowships, Prizes and a Post-Doctoral Fellowship for her contribution to Translation Studies.

Ekaterini has published articles on theatre translation (the most known being “*Performability versus Readability: A Historical Overview of a Theoretical Polarization in Theatre Translation.*” *Translation Journal* 6.4 (October 2002; it can be viewed at <http://translationjournal.net/journal/22theater.htm>), reviewed books and articles and authored two Studies Programs for Applied Linguistics. She taught World Literature, English and Greek (*Koine* and Modern Greek) at Canadian and US Universities, while being in North America.

Since she came back to Greece, Ekaterini has been appointed an ESP (: English for Specific Purposes) and EAP (: English for Academic Purposes) teacher in the School of Social Sciences, and has been teaching ESP and EAP in the Departments of: Geography, Social Anthropology and History, Cultural Technology and Communication, Sociology and Marine Sciences of the respective university.

In her spare time, she does research both on teaching foreign languages (especially, English) at a university level and on theatre translation, publishes articles, reviews articles for international journals, and works as a freelance bi-directional translator and interpreter, when her services are required.

**Plenary Keynote Address:** “*International Conferences: Topoi of inter-disciplinary communication or a break-down of it?*”

**Abstract:** Within an international conference context, English and non-English academics and researchers usually try to communicate their own research in English (*lingua franca*). The author

will, first, define what inter-linguistic communication in a *glocalized* context means and, then, by “embroidering” her text around the term “**grid**” will show how awareness (*noesis*) or lack of the different meanings of this term in various disciplines (i.e. electrical and mechanical engineering, architecture, topography, archaeology, geography) in *English* and of different terms in *another language* (i.e. *Greek*) can either enhance an international academic communication or break it down with many misunderstandings.

Given the complexity of the inter-linguistic communication, the author will discuss how an inter-disciplinary communication in an international conference can be achieved from a linguistic and inter-discursive point of view. First, English and non-English academics and researchers should become aware (*noesis*) of the issue of **inter-scientificity**. Second, they may wish to acquire **inter-scientific competence** either by being trained (in/by their own Institutions) and/or by using **WWW** to their advantage. Last but not least, they may create a bilingual or multilingual TDB (: Terminological Data Bank), a knowledge management tool, if they do not want to lose all knowledge they have acquired during their learning process.

Specific examples will provided during the presentation.

### **9:20 AM – 10:00 AM**



**Dr. Patrick Mennig**, Germany, Fraunhofer IESE, Smart Farming, Smart Cities and Mobility as a Service

**Dr. Patrick Mennig** is a Digital Innovation Designer working at Fraunhofer IESE since 2017. In this role he is working in various industry and research projects with clients from different domains such as Smart Farming, Smart Cities and Mobility as a Service. As a digital innovation designer, he applies his background in requirements engineering and information systems to support clients in designing novel innovations for digital experiences. This includes the design and organization of several different workshop formats, bringing together interdisciplinary teams of researchers and practitioners to solve wicked problems. In parallel, his research efforts focus on the improvement of workshop methodologies in general and the documentation of such workshops in particular. Constantly, he is eager to teach the learnings gained at Fraunhofer IESE to university students in different courses such as requirements engineering, mobile software engineering and IT project management.

### **Plenary Keynote Address: “*Many Talents is no Talent: Creativity and Virtual Collaboration*”**

**Abstract:** Creativity is an important skill in our modern world, regardless of the domain one is concerned with. Solving wicked problems through novel solutions is an ongoing endeavor of mankind. But the problems we are facing are more wicked than ever, requiring expertise and solid knowledge to be solved. At the same time, the problem’s domains are more and more interwoven. Jacks of all trades are masters of none, but versed in many talents. Do they have a natural advantage when it comes to creative problem solving? In Japan they say “many talents is no talent”, but who is right? Is multidisciplinary collaboration the answer? In this keynote we

explore the basic building blocks of creativity from a software engineers' perspective and discuss how can they be applied in a post-covid world. Virtual collaboration quickly became the new normal, but did we leave people behind in our quick transition to the virtual world? Working together to solve problems is, at the same time, easier and harder than ever and no talent should be left behind.

### **1:00 PM – 1:40 PM**



**Dr. Teresa Langness**, USA, Nonprofit Board President at Full-Circle Learning

**Dr. Teresa Langness**, is an author (50 books), an educational development specialist, and an editor. She is the author of *Nine O'Clock Blue* and Founder of Full-Circle Learning, a project-based integrated education model pioneered in 1992 and applied in 35 countries by 2021. Programs include capacity building for teachers, especially in developing countries, and direct service for educational programs in the US, to help each generation embrace its role as society's humanitarians and change

agents. See [www.fullcirclelearning.org](http://www.fullcirclelearning.org) for details about worldwide programs.

Her book-length works include educational texts, literary historical fiction, poetry and nonfiction. She has participated with conference papers on environmental, sociological, and educational issues. Dr. Langness is content developer for all learning levels, including online course content; staff positions have included in-house education companies. She wrote and published five professional music CDs to support curriculum.

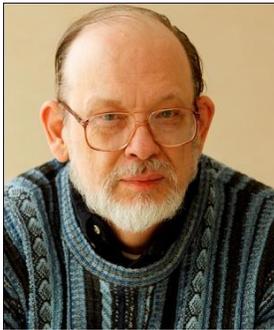
Other publishing credits include *The Writer*, *Seattle Times*, *Rocky Mountain News*, literary journals and other periodicals. Dr. Langness also served as an officer on multiple boards, in the fields of education, environment, human relations, and the public health, including North American Bear Society, Human Relations Forum of Torrance, Health for Humanity, Visions of Unity Project, Nevada County Climate Action Now, CCBB and Baha'i Spiritual Assembly. She is a recipient of various service awards and was nominated for the Yidan prize and the Gustavus Meyerson literary award.

### **Plenary Keynote Address": *'Improving Life' as a North Star for Research*"**

**Abstract:** This keynote address evaluates the impact of research centered on enhancing the quality of life. It presents examples of research in which the essential question, pivoting around altruistic possibilities, set in motion long-term outcomes that extended beyond the length of the project. The examples listed occur in the past and present, across the disciplines, in engineering, science, social science, social action research, education, and communications technologies. The relationship between research questions, methods, and long-term outcomes pointed to the concept that research guided by a North Star influences not only the subjects involved but the broader society. In some cases, it ultimately enhanced the cohesion and destiny of humans and other species. Thus, continually holding this as an ideal had the potential to shape the researcher, the research field, and human progress itself. Findings include the long-term outcomes accrued

during and beyond the lifetime of the researchers involved. Conclusions are reinforced by global trends in “Improving Life” as the result of research.

### **1:40 PM – 2:20 PM**



**Professor Emeritus Thomas Marlowe, USA, Seton Hall University, Professor Emeritus, Department of Mathematics and Computer Science, PhD in Computer Science and PhD in Mathematics**

Thomas J. Marlowe is Professor Emeritus in the Department of Mathematics and Computer Science at Seton Hall University, where he taught a wide variety of courses in both disciplines for almost 40 year, and where he continues to teach occasionally as an adjunct. Professor Marlowe enjoys working with students and with professional colleagues—almost all his research is collaborative. His professional interests have included, in mathematics, abstract algebra and discrete mathematics; in computer science, programming languages, real-time systems, software engineering, and pedagogy; and in information science, collaboration and knowledge management. His two PhDs are from Rutgers, The State University of New Jersey. He has over 100 publications in refereed conferences and journals in mathematics, computer science and information science, and has been a member on more than 10 Ph.D. thesis and 5 M.S. thesis committees, a member of more than 25 conference program committees, and a reviewer for numerous conferences, journals, and grants. He is the founder of an ongoing professional conference, and has been active with the IIIS and the WMSCI multiconference since 2008.

#### **Plenary Keynote Address: “*Implicit Cybernetic Systems—A Controlling Metaphor, or a Metaphor Out of Control?*”**

**Abstract:** Extending first-order cybernetic systems such as mechanical or mechatronic thermostats, or social structures such as the U.S. Federal Reserve control of monetary policy, on the one hand, and explicit second-order cybernetic [SOC] systems including physical therapy or on-site sociological studies, on the other, it is often possible and useful to identify implicit SOC systems in domains ranging from the economy to teaching.

One can use implicit SOC systems as an analogy or metaphor to other areas, including the liberal arts. Among the benefits, this supports interdisciplinarity, suggests avenues of investigation by analogy, and may illuminate, clarify, extend, or unify philosophical and socio-philosophical investigations into issues including epistemology and learning, causality and reciprocity, and agency and ethics. As an example, I consider situations in software engineering and data science.

On the other hand, “that which explains everything explains nothing”. Further, this approach leads almost inevitably to complications: cascades and networks of cybernetic controllers and observers; conflicts among controllers and/or malicious controllers; and inadequate, improper, or inappropriate controllers; and others. This is illustrated by an account of the confusions I encountered while trying to carry out this research program.

The talk concludes by providing a tentative overview and asking for reactions and advice. This presentation and underlying research developed in collaboration with Fr. Joseph Laracy and Dr. Jessica Fitzpatrick.

**2:20 PM – 3:00 PM**



**Professor T. Grandon Gill**, USA, University of South Florida, College of Business, Director of the Doctorate in Business Administration, Editor-in-Chief of *Informing Science* , Editor of the *Journal of IT Education*

**Dr. Grandon Gill** holds an AB (cum laude) from *Harvard College* and an MBA (high distinction) and DBA from *Harvard Business School*. He is a professor and the Academic Director of the Doctor of Business Administration program at the *University of South Florida's Muma College of Business*. He was also recently elected president of the *Informing Science Institute*.

Dr. Gill has published more than 60 peer reviewed articles, more than 60 case studies, and has authored or edited 11 books relating to his research in the informing science transdiscipline and in the use of case studies for education and research. Over the past decade he has served as principal investigator on two grants from the National Science Foundation, completed a core faculty Fulbright in South Africa, and received the Gackowski award for his lifetime contributions to informing science research and the Ranulph Glanville award for his research activities.

T. Grandon Gill is a professor and academic director of the Doctor of Business Administration program at the University of South Florida's Muma College of Business. His research focus is on understanding the impacts of instructional technology on learning and on how complexity impacts informing processes. He received his A.B. degree from Harvard College and his MBA and DBA degrees from Harvard Business School. He has published more than 100 research articles and case studies, has authored or edited 10 books, has served as principal investigator on two National Science Foundation grants and completed a three-year core research Fulbright in South Africa in 2017. Most recently, Grandon was appointed the leader of a faculty working group whose mission is to help instructors adept to new ways of teaching mandated by the pandemic.

**Plenary Keynote Address: “*The Predatory Journal: Victimizer or Victim*”**

Labeling a journal as “predatory” can do great damage to the journal and the individuals that have contributed to it. This presentation considers whether the predatory classification has outlived its usefulness and what might replace it.

With the advent of open access publishing, the term “predatory” has increasingly been used to identify academic journals, conferences and publishers whose practices are driven by profit or

self-interest rather than the advancement of science. Absent clear standards for determining what is predatory and what is not, concerns have been raised about the misuse of the label.

The presentation includes a brief review of the literature, some examples, and a conceptual analysis. It concludes that: a) current predatory classifications are being assigned with little or no systematic research and virtually no accountability, b) the predatory/not predatory distinction also fails to accommodate alternative journal missions, and c) that the damage caused by Type 1 error (misclassifying a legitimate journal as predatory) is far more tangible and difficult to correct than Type 2 error (failing to identify a predatory journal as such).

After completing the analysis, recommendations for reducing the impact of illegitimate journals consist of:

1. Dropping the "predatory" and focusing on distinguishing legitimate and illegitimate journals, based on evidence of intent.
2. Requiring faculty position applicants and those seeking promotion and/or tenure to supply copies of peer reviews received for subsequently published articles to verify the quality control of the journals involved.
3. Classifying journals by mission and evaluating each journal's practices according to fit with the mission. Initially proposed categories are: competitive, developmental, exploratory and translational.
4. Encouraging institutions to develop portfolio-style targets for publications in different categories.
5. Developing a crowd-sourced site where different categories of journal can be rated by authors, reviewers and readers.

**General Framework and Plenary Keynote Speakers of the Collocated Conferences**  
The 12<sup>th</sup> International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2021  
The 12<sup>th</sup> International Conference on Society and Information Technologies: ICSIT 2021  
The 11<sup>th</sup> Ibero-American Conference on Complexity, Informatics and Cybernetics  
*Décima Primera Conferencia Iberoamericana de Complejidad, Informática y Cibernética: CICIC 2021*

***Plenary Keynote Addresses – Friday, March 12<sup>th</sup>, 2021***

**8:00 AM – 8:40 AM**



**Dr. Yuriy Mikheev**, Russia, Saint Petersburg State University.  
Assessment and Development Department of Training Institute

**Dr. Yuriy Mikheev** has a Ph.D. in Organizational Psychology from Saint Petersburg State University, Russia. He led the laboratory of Organizational Psychology Diagnostic Methods and has been Assistant Professor of The Psychological Faculty for 7 years.

Dr. Yuriy Mikheev is the Head of Assessment and Development Department of Training Institute. For over 20 years he has been practicing in organizational and personal consulting. He is a member of the Task Force on Assessment Center Standard of the Russian Federation.

Dr. Mikheev is interested in accurate prognosis methods and works out biographical methods for predicting long-term career success. He also, works out unsupervised machine learning algorithms that help make accurate predictions.

**Plenary Keynote Address: “*The borders of cognition. State-of-The-Art Perspectives*”**

**Abstract:** In this presentation, we will take a closer look at the state-of-the-art understanding of cognition and consider cognition from scientific, personal and humanity perspectives.

We will show that cognition is a direct result of functioning fundamental physical phenomenon – the entropy increasing and existence of complex relations among observed events. Cognition is considered as a process of changes in the system that results in getting the ability to make accurate prognoses and decisions. Decision and, in particular, an accurate prognosis is the result of cognition functioning. In the previous work, we introduced the measure of regularity of the relation among observed events [1] and demonstrated its usefulness for regularities recognition. We consider retrieving and recognizing regular relations in the observed reality as a core of cognition. In this paper, we show the connection between the introduced measure and the second law of thermodynamics applied to nonequilibrium dynamic systems [2]. On that basis, we infer that cognition exists in such systems and depends on the complexity of relations among observed events of the environment. From this, it follows that observed complexity defines cognitive system complexity. People have to live in an informational explosion and adapt to it. Therefore

we are coming to the next evolutionary step. The global problems we faced demand structural changes that could be done by growing specialization and integrating it.

[1] Mikheev Yury. The Measure of Regular Relations Recognition Applied to the Supervised Classification Task. January 2019. In book: Machine Learning, Optimization, and Data Science

[2] Prigogine, Ilya (1961). Introduction to Thermodynamics of Irreversible Processes (Second ed.). New York: Interscience.

### **8:40 AM – 9:20 AM**



**Dr. Adrian Leka**, Albania “Luigj Gurakuqi” University of Shkoder

**Dr. Adrian Leka** is a lawyer with more than 12 years of legal experience and eight years of academic experience. He obtained his law degree and his LLM from the “Luigj Gurakuqi” University of Shkoder, and in 2015 he obtained his PhD in criminal law from the University of Tirana, Albania. In 2012, he was licensed as an attorney by the Chamber of Advocates of Albania. Mr. Leka started his academic career in 2013. Since then, he has been teaching criminal law full time at the “Luigj Gurakuqi” University of Shkoder. Dr. Leka has published extensively in Albania and abroad. His main academic interest has been criminal law, but he has published in a number of other current legal issues.

#### **Plenary Keynote Address: “*Legal education as support for democracies*”**

**Abstract:** Citizens’ knowledge of the law plays an essential role in any democratic society where human actions and relations are regulated by legal norms and rules. As these rules are often complex and subject to change, and more often than not, based on a generalized perspective rather than a personal one. To establish and maintain an effective justice system, it is necessary to guarantee public access to the knowledge of law. This keynote address will focus on a new approach that public knowledge of the statutes, rights, obligations, etc., is not only a legal education function, but also a component of the dominant culture and of the civic need for access to the justice system. The address will use the examples of emerging democracies, mainly in Western Balkans, to reach into the conclusion that effective public education can only be achieved when it is considered part of both educational and justice reform processes, and how effective public legal education contributes to justice reform.

**9:20 AM – 10:00 AM**



**Professor Stefano Follesa**, Italy, University of Florence, DIDA Department Architecture School, Design of Relational Spaces Laboratory,

**Professor Stefano Follesa** is Researcher at the University of Florence, Department of Architecture, Professor of Product Design and Interior Design and Visiting Professor in international universities. He is currently Educational Coordinator of the Master in Interior Design and scientific director of the DSR Lab (Design of Relationship Spaces Laboratory) at the University of Florence.

Professor Follesa He has published essays and monographies. on research topics related to cultural identity, narrative design and design of spaces and is actually co-director of the editorial series “Design Innovazione e Territori” for the publisher Franco Angeli in Milan. He is "Ambassador of Italian Design in the world" appointed by the Ministry of Foreign Affairs and International Cooperation of Italian Government



**Ms. Sabrina Cesaretti**, ARQ, MDES, Italy, University of Florence, DIDA Department Architecture School, Design of Relational Spaces Laboratory,

The drawing, childhood’s playmate, is constant in her training from the Artistic High School to the Department of Architecture in the University of Florence, where she graduated in 2013 with her thesis in architectural design "Anatomy of a landscape: the new Leonardiana Library in Vinci".

Her work experiences lead the comparison of the discipline to various scales and to more facets, drawing on transversal worlds such as fashion, art, literature, nature and territory, which constitute source of inspiration.

In 2019 she obtains the Master in Interior Design. Currently she also deals with scientific research at the Laboratory *Design of the Relationship Spaces* in the School of Architecture in Florence.



**Dr. Francesco Armato**, Italy, University of Florence, DIDA Department Architecture School, Design of Relational Spaces Laboratory,

**Dr. Francesco Armato** is President of the FRIDA Research Institute (Florence Research Institute Design Art), He is Architect, Ph.D., Researcher, and Lecturer at the Industrial Design Course and the Interior Design Master of the University of Florence and at the LABA, Free Academy of Fine Arts of Florence (AFAM).

He is also Visiting professor at Suzhou Art And Design Institute e Jiangsu College of Engineering and Tecnology, Nantong University, China, participating in various conferences, seminars, and workshops concerning Product and Interior Design.

### **Plenary Keynote Address: “*Issues of form*”**

**Abstract:** In a scene radically varied by the effects of the pandemic, a reflection opens on which guidelines and methods should turn today educational research, an area no less spared, which also manifests the fragility of a system made of static habits. The knowledge of how design originates from the ability to adapt to the changes of a society in continuous evolution, in which modernity has however unquestionably marked the loss of forms built over the centuries, implementing a radical break with the past.

Investigating the variations of teaching through the comparison between historical models and new tools and processes of the digital age, the paper questions the concept of form, proper to the design project but also immaterial tool of culture, a means of coexistence and a place of mutual exchange, to define the changeability we are witnessing in the transition from classrooms to home desks. In fact, it is increasingly necessary to re-establish relations between the parties involved, to restore a communicative capacity that knows how to overcome difficulties and fears in the awareness that, as in the most famous physical law, nothing is created or destroyed, but it only changes in its form.

Keywords: training, design, form, relations.

### **1:00 PM – 1:40 PM**



**Dr. Risa Blair**, USA, Purdue University Global, eLearning Instructional Designer, Education Management, Instructional Associates, Director of HR and Operations

**Dr Risa Blair** is Passionate leader and trainer with extensive experience in higher education and corporate settings, including project management, curriculum development and delivery for face-to-face and online settings. She has exceptional skills in facilitating content delivery to meet the needs of the client. She is a strong proponent of utilizing real world experience and technology to promote and reinforce learning, as well as to meet required outcomes. She is easily able to deliver technical content to non-technical audiences. Quality Matters trained online course reviewer.

### **Co-Panelists**

Dr. Tina Serafini  
Dr. Lorayne Roberson  
Dr. Bill Muirhead  
Ms. Camille Dumont

Dr. Richard Montanaro  
Dr. Marcia Williams  
Dr. Lyndon Godsall  
Mr. Glen Jenewein

**Plenary Keynote Address: “*Online Education and Communication*”**

**Abstract:** Our students are being attacked on all sides by COVID-19. This session will share student cases and strategies for using effective technology and communication across the curriculum to help keep students engaged in their studies. Creative communication technology strategies can serve as game-changers for extroverted as well as introverted students. Introverts tend to be more detail-oriented, yet may be shy to ask for guidance or assistance. Extraverts may be overconfident in what they do and how they perform. To manage these oppositional personality types in the online classroom, the professor has the capacity to embrace the gaps through the use of technology.

**1:40 PM – 2:20 PM**



**Dr. Risa Blair, USA, Purdue University Global, eLearning Instructional Designer, Education Management, Instructional Associates, Director of HR and Operations**

**Shot Bio Given Above**



**Dr. Nagib Callaos, International Institute of Informatics and Systemics, USA, Editor-in-Chief of the Journal of Systemics, Cybernetics and Informatics**

**Dr; Callaos** is Former Dean of Research of The University Simon Bolivar and **is** the Founding President of a 32 years old Multi-Disciplinary Organization, in the same university, oriented to 1) solve real life problems which mostly require multi-disciplinary teams and inter-disciplinary research/communication and 2) synergistically relate all disciplinary and inter-disciplinary departments of the University Simon Bolivar with private and public corporations. He also was the founding president of several organizations for research, development, and technological innovation and, for about 20 years, consultant in Information Systems and CEO of an Information Systems Development in a private organization. He managed more than 150 projects in information systems development where he applied his Generalized Systemic Methodology, one of its versions, as applied to Information System Development, were named as “The Agile Movement”.



**Dr. Jeremy Horne, USA, President-emeritus of the Southwest Area Division, American Association for the Advancement of Science (AAAS)**

**Short Bio Below**

**Plenary Conversational Session on “*Ethical and Meta-Ethical Issues of Peer Reviewing*”**

The purpose of this plenary virtual conversational session is to refer to the ethical and meta-ethical issues associated with authors, editors, and conferences’ organizing committees. Reviewers’ ethics is more known and will be addressed in other conference. Our hope with this conversational session is to increase awareness about this issue, trigger more reflections and research oriented to solve or, at least, improve the actually accepted peer reviewing methods.

David Kaplan in his short article (2005, How to Fix Peer Review. *The Scientist*, 19) explicitly affirms that

*“Review of a manuscript would be solicited from colleagues by the authors. The first task of these reviewers would be to identify revisions that could be made to improve the manuscript. Second, the reviewers would be responsible for writing an evaluation of the revised work. This assessment would be mostly concerned with the significance of the findings, and the reviewers would sign it.”* (Kaplan, 2005) [Italics and emphasis added]

Our experience, since 2006, shows that a reviewing methodology, based on what Kaplan suggested in his article, increases the effectiveness of peer review. But, a reviewing methodology, based on it, may also address the ethical issues of the authors and the meta-ethical responsibilities of editors and conference organizers, i.e. to be aware about the their ethical responsibility in minimizing the probability of a non-ethical behavior of any author.

At both levels, ethical and meta-ethical, two ethical perspectives apply: 1) **deontological** ethics (grossly: what should not be done) and 2) **Consequentialist** ethics (grossly: what may and/or should be done). We think that both ethics complement each other and both of them apply to both sides: authors and editors.

The purpose of this conversational virtual session is to address any of the quadrants of the resulting 2x2 matrix.

**2:20 PM – 3:30 PM**



**Dr. Jeremy Horne**, USA, President-emeritus of the Southwest Area Division, American Association for the Advancement of Science (AAAS)

**Dr. Jeremy Horne** is President-emeritus of the Southwest Area Division of the American Association for the Advancement of Science (AAAS). He currently is writing a book explicating a philosophical system based on his research and writing in the areas of logic as the language of innate order in the universe, an ongoing 40-year project. His areas of specialization are binary logic (with course work in symbolic logic, philosophy of computers, set theory, ontology, dynamic validation, social and political philosophy, political economy, history of philosophy, and philosophy of education. His ongoing research interests are in the philosophy of organicity, recursion in three-dimensional binary space, autonomous hybrid systems, the ontology of number and time, and states of life and consciousness. Present work is writing a book describing the philosophical system embracing explanations of cosmological and quantum semantics of binary logic, consciousness studies, paradoxes, systems theory, and organicity.

Dr. Horne taught many courses in philosophy (including his specialty logic), political science, and technology, having delivered many presentations on the philosophy of scientific methods for the American Association for the Advancement of Science (AAAS), the IIS, and quantum mind conferences. He has been a peer reviewer for various journals about the structure and process in binary space, consciousness studies, systems theory, and philosophy of science. For "bread and butter" work, he was a documentation systems developer for the White Sands Missile Range in New Mexico, a culmination of some twenty years' work in the field of documentation. His recent publications include a book *Philosophical Perceptions on Logic and Order*, chapters of several books released by IGI Global Press, and a "kernel" chapter, "Philosophical foundations of the Death and Anti-Death discussion", appearing in the Vol. 15, *Death And Anti-Death* set of anthologies by Ria Press (2017).

He is searchable under his name, the more academic entries appearing by using the academic degree suffix. His document repository may be accessed at <https://sites.google.com/site/yourmindshomepage/>.

**Plenary Keynote Address: “Zero Is Greater Than One”**

**Abstract:** Two special editions of *The Journal on Systemics, Cybernetics, and Informatics* (JSCI), subtitled "Rigor and Inter-Disciplinary Communication" and "Philosophy & Cybernetics" stem from "interdisciplinary" thinking, the heart of this journal and its embracing organization, the International Institute of Informatics, and Systemics (IIS), one of the few, if not the only organization, exclusively devoted to the study of the concept. We find "cybernetics" within the context of "interdisciplinary", also carrying the same import of integration, interdependence, and organicity as "cybernetics".

To see why requires thinking about thinking, or philosophy, more precisely a philosophical system. Yet, all philosophical systems are beset by the insurmountable problem of attaining universal incontrovertible truths, that is, metaphysical certainty. A tentative solution exists. Consider zero greater than one. Numerous subsets of discussions emerge, not the least of which emergence, itself, the whole greater than the sum of its parts, the very essence of synthesis, or induction.

Sometime in the middle-latter part of this year, the book *Zero is Greater Than One* will be released, explaining the philosophical system birthed by the philosophy of cybernetics. To see why  $0 > 1$  requires accepting our limitations of knowing and realization.

I start with "discipline" having a generic meaning. Its academic meaning - rigor and specialization - are combined as intense focus, reducing scope ultimately to the smallest of the smallest, interacting Planck scale units, also in a unique manner characterizing the substratum, both process and object contained within the singularity and giving rise to what we have today. This substratum characterizes the most fundamental law, the unity of difference, by its essence of "interdisciplinary". Bootstraps, an answer to the metaphysical problems, are starting points, the singularity with its superposition and the language of logic describing it. Pervading everything is the most fundamental law, the unity of difference; something exists because of what it is not. Interesting it is as a sidebar how modern computing is moving towards supercomputers, the Q-bit, based on superposition as the computing unit. Herein, Aristotle's substratum operates to describe our world. Ultimately, my discipline here is sociointelligence, the study of how we can transcend ourselves through cybernetics.

Integration and interdependence are dynamic, meaningless absent a framework, a special kind, a system, a dynamism explicitly operating inside and over a system with its descending subsets of objects and processes, designated logically as variables (like "a"s), those also ascending from Planck units to suprasystem, all mutually interacting. Contained within innately, thus implicitly, are deduction (descension of sets) and induction (ascension of sets – think "fuzzy").

Dynamism does not occur in isolation, it reflecting the same organic essence shared by humans, their environment, and between the two. "Cybernetics" describes that vital connection between dynamic systems and organisms, in founder Norbert Wiener's words, "the scientific study of control and communication in the animal and the machine". In the end, humans not only live "interdisciplinary" as well as study it but internalize it, ultimately being it.

Recursion, subsumed by cybernetics, occurs with virtually every dyadic relationship in the Universe, each's output forward-fed as inputs, ultimately reproducing the relationship. If logic is a language of innate order in the Universe, so recursion describes it, hence, cybernetic. In a true recursive manner, that cybernetic one, the IIS studies itself, hence, self-reflective.

The philosophical system, resting on the pillars of ontology and epistemology (with its substructure of rationalism and empiricism), describes the relationships between cybernetics, and "interdisciplinary", moreover how we arrive at the connection and why. The system, itself, stands on ontology and epistemology, recognizing the inefficacy of attempts at absolutist metaphysics, deferring to bootstrapping.

**NB to the nitpickers:** I insist on a modified British punctuation style.

**General Framework and Plenary Keynote Speakers of the Collocated Conferences**  
The 12<sup>th</sup> International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2021  
The 12<sup>th</sup> International Conference on Society and Information Technologies: ICSIT 2021  
The 11<sup>th</sup> Ibero-American Conference on Complexity, Informatics and Cybernetics  
*Décima Primera Conferencia Iberoamericana de Complejidad, Informática y Cibernética: CICIC 2021*  
  
***Conversational Sessions and/or Participative Panels, Tuesday, March 9<sup>th</sup>, 2021***

**MORNING**

**8:00 AM – 8:40 AM**

**Host and Moderator**



**Dr. Nicola Fabiano**, Italy, Founder and CEO of Studio Legale Fabiano, President of the first San Marino Data Protection Authority

Nicola Fabiano, Lawyer, Council of Italian High Court, Civil Law Specialist, expert and advisor for Data Protection, Privacy and Cyber Security, Independent researcher, Innovator. Nicola is a frequent speaker at international conferences on data protection, privacy, Cyber Security, IoT, Blockchain, publishing articles, essays, books, and papers. In 1994 Nicola founded Studio Legale Fabiano. From November 2017 to April 2018, He has been Government advisor of the Republic of San Marino for the drafting of the data protection legislation. On January 2019, Nicola has been appointed as President of the first San Marino Data Protection Authority. Member of the "IEEE SA P7007 Ontological Standard for Ethically Driven Robotics and Automation Systems Working Group" and chair of the "Data Privacy and Protection" sub-group. Member of the Working Group of the FIIF (Fondazione Italiana per l'Innovazione Forense – Italian Foundation for the Forensic Innovation) of the Italian CNF (Consiglio Nazionale Forense – Italian National Bar Council).

**Conversational Session on: “Privacy and Cybersecurity”**

**Abstract:** Privacy and Cybersecurity very often have been considered similar and overlapping domains. In reality, they are different contexts, sometimes close to each other.

The concept of privacy is strictly related to the natural person, the human being, while cybersecurity concerns the security measures adopted to protect data.

Indeed, privacy legislation refers to cybersecurity, as the data controller and processor should, each for their role, adopt appropriate security measures. There is an intersection among all privacy and cybersecurity topics.

One of the main points is risk analysis.

The main focal point to address a correct approach to any evaluation of privacy risks, in general, is to understand the differences between security and privacy.

Distinguished authors have correctly pointed out that security is not equal to privacy. According to this principle, it is possible to adopt very high-security measures, but this cannot mean respecting privacy law either protect users' privacy. This concept often indicates that it is necessary to intervene in the security systems to comply with privacy law.

The mentioned statement might generate a big misunderstanding and confuse the privacy approach and its consequences.

Adopting security measures is certainly a value, but it is not the correct way to deal with privacy issues.

To correctly address privacy and data protection, it is necessary to start from the privacy by design (or data protection by design and by default) approach, as further clarified below. Privacy is embedded in the design. More clearly, "Privacy, having been embedded into the system before the first element of information being collected, extends throughout the entire lifecycle of the data involved, from start to finish."

**8:40 AM – 9:20 AM**

### **Host and Moderator**



**Dr. Teresa Langness**, USA, Nonprofit Board President at Full-Circle Learning,

**Dr. Teresa Langness**, is an author (50 books), an educational development specialist, and an editor. She is the author of *Nine O'Clock Blue* and Founder of Full-Circle Learning, a project-based integrated education model pioneered in 1992 and applied in 35 countries by 2021. Programs include capacity building for teachers, especially in developing countries, and direct service for educational programs in the US, to help each generation embrace its role as society's humanitarians and change

agents. See [www.fullcirclelearning.org](http://www.fullcirclelearning.org) for details about worldwide programs.

Her book-length works include educational texts, literary historical fiction, poetry and nonfiction. She has participated with conference papers on environmental, sociological, and educational issues. Dr. Langness is content developer for all learning levels, including online course content; staff positions have included in-house education companies. She wrote and published five professional music CDs to support curriculum.

Other publishing credits include *The Writer*, *Seattle Times*, *Rocky Mountain News*, literary journals and other periodicals. Dr. Langness also served as an officer on multiple boards, in the fields of education, environment, human relations, and the public health, including North

American Bear Society, Human Relations Forum of Torrance, Health for Humanity, Visions of Unity Project, Nevada County Climate Action Now, CCBB and Baha'i Spiritual Assembly. She is a recipient of various service awards and was nominated for the Yidan prize and the Gustavus Meyerson literary award.

### **Conversational Session on *'Improving Life' as a North Star for Research***

Abstract: This session is based on a plenary talk and paper evaluating the impact of research centered on enhancing the quality of life. The material presents examples of research in which the essential question, pivoting around altruistic possibilities, set in motion long-term outcomes that extended beyond the life of the project. The examples occur across the disciplines, in engineering, science, social science, social action research, education, health, environment, and communications technologies. The human processes that redounded to human progress point to the concept that research matters most when it sustains life, improves the quality of life or otherwise enhances the cohesion and destiny of humans and other species, and that continually holding this as an ideal has the potential to shape the researcher, the research field, and human progress itself. Findings include the long-term outcomes accrued during and beyond the lifetime of the researchers involved. Conclusions are reinforced by transdisciplinary trends inaugurated as the result of research.

### **Discussion Questions**

1. What process have you pursued in your own work that helped you identify a North Star? Do you have models for shaping a career harnessed to a conviction that enhances life? Have setbacks altered your path or strengthened your resolve?
2. Some of the greatest success stories of Nobel prize winners have confirmed the value of centering research around a firm conviction but also seeing the question through the eyes of colleagues across the disciplines, who may apply the research differently to improve life even more effectively. Have you witnessed that process in your own work?
3. Have you faced challenges that sent you on a research path far from your North Star? Have industry standards proven a springboard or a ceiling for your research? If so, how have you overcome the challenge?
4. Have you seen a pattern between the timing of world events and your own personal and professional evolution? How does your research about improving life for others affect your own transformation and vice versa?
5. Take one minute to think of a wish you have always had, such as the Esther Duflo's wish to create a system to end poverty. Raise your hand in the Participant feature if you would like to state your name, your research area, and your North Star wish. As you listen to one another, think of the potential for overlapping ideals and ideas. Does someone else's North Star align with yours? Could there be an area of joint research to create a Super Nova star? If so, in the chat, send them your contact information and begin a collaboration. Then follow your North Star together.

**Keywords:** Research Improving Life, Semiotics, Altruism, Transdisciplinary Trends, Cybernetics, Goal Setting, Transformation.

**9:20 AM – 10:00 AM**

## **Hosts and Moderators**



**Dr. Jon K. Burmeister**, USA, College of Mount St. Vincent, in New York City

**Dr. Jon K. Burmeister** is Assistant Professor of Philosophy at the College of Mount St. Vincent, in New York City. His dissertation was on Hegel's idea of a 'living' logic and what this entails for philosophical language. His research combines a background in the history of philosophy with investigations of emerging digital technologies and their social and ethical impacts. Dr. Burmeister was the recipient of a 2016-2017 National Endowment for the Humanities "Enduring Questions"

Grant on the subject of Work and Leisure.



**Dr. Ziyuan Meng**, USA, Drew University, New Jersey

**Dr. Ziyuan Meng** is Assistant Professor of Computer Science at Drew University, New Jersey, United States. Ziyuan Meng received his Ph.D. in Computer Science at Florida International University. In his 5 years of teaching experience, Ziyuan has helped multiple institutes to develop cybersecurity curriculum with emphasis on an interdisciplinary approach. His main research focus is to bring insights from continental philosophy and cognitive science to develop non-reductionist computational logic in the context of cybersecurity.

### **Conversational Session on: “*Cybernetics and Philosophy*”**

If Norbert Wiener defined cybernetics as “the scientific study of control and communication in the animal and the machine,” what might such a study have in common with the discipline of philosophy?

Philosophy and cybernetics investigate many of the same themes: the relationship between what is natural and what is artificial, the question of what makes a ‘mind,’ the question of what constitutes knowledge, etc. We thus wish to ask: what can cybernetics and philosophy learn from each other?

Themes for discussion in this conversational session include:

1. Is it possible to sustain a distinct divide between the natural and the artificial, between the animal and the machine? (philosophers have often said yes, while cyberneticists have often said no)
2. What are the ethical implications of creating automated, self-regulating systems which might eventually appear to possess agency?

3. What are the ethical results of humans becoming more like machines, via our interactions with them, and of machines becoming more like humans, via their interactions with us? Questions about a ‘post-human future’ also arise in this context.
4. Cybernetics in its “second-order” phase studies systems which include the *observer* of the system as one of its parts. What dialogue can arise between second-order cyberneticists and philosophers who study the theory of knowledge? Between information theorists and epistemologists?

We suggest that cyberneticists can benefit from drawing foundational ideas from the philosophical tradition, and that philosophers can benefit from drawing on the mathematical and technical expertise of cybernetics to better investigate their perennial questions. But other possible relations between these two disciplines surely exist and can be discussed in this session.

**10:00 AM – 10:40 AM**

### **Host and Moderator**



**Professor Andres Tremante**, USA, Florida International University, Director of the Center for Diversity and Student Success in the College of Engineering and Computing

**Professor Andres Tremante** is the new director of the Center for Diversity and Student Success in the College of Engineering and Computing (CD-SSEC). In this position, Dr. Tremante is responsible for all aspects of the College’s K-12 programs and pre-college STEM activities, working closely with the college advisors and associate deans to improve student success, graduation & retention rates and in advancing the mission of the college. He will also support the Industry-University Cooperative Programs and the ERC’s Diversity and Inclusion areas for PATHS-UP and CELL-MET. He is also the deputy director of the CELL-MET Culture of Inclusion Thrust Area.

Professor Tremante received his bachelor’s degree in mechanical engineering from Universidad Simon Bolivar and his doctoral degree from Arts et Métiers Paris Tech. He joined FIU in 2008 after 25 years of experience in Europe and Latin America, mostly in academia and the oil industry. He brings forward a long record of teaching, scholarly research, academic service and strong credentials for leadership as the director of CD-SSEC

**Participative Panel on: “*A Program for Inter-Disciplinary Communication via trans-disciplinary topics in Engineering and Computing*”**

**Abstract:** "Through corporate grants from several organizations, the Center for Diversity and Student Success in Engineering and Computing (CD-SSEC) is launching the Opportunities for Undergraduate Research and Scholarship (OURS) program. OURS’ mission is to foster a culture of research excellence within the College of Engineering and Computing at Florida International University (FIU) that is committed to promoting opportunities for all students, especially those

from underrepresented populations and disadvantaged backgrounds. This is multi-leveled program model with financial incentives that encourages trans-disciplinary topics in Engineering and Computing, project-based studies, and curriculum-related work opportunities, which greatly reduces the need for students to find off campus jobs that do not align with their long-term career goals. Success will be measured through student retention, graduation rates, enrollment, and post-graduate placement. We embrace our multicultural environment, inter-disciplinary communication and the diversity in thoughts, beliefs, and ideas. We incorporate evidence-based scientific learning and teaching methods in our services and programs. We aspire for innovation, creativity, ingenuity, equity, and inclusion"

**10:40 AM – 11:20 AM**

### **Hosts and Moderators**



**Dr. Risa Blair, USA,** Purdue University Global, USA, Adjunct Faculty, Department of Humanities and Social Sciences, School of General Education; Instructional Associates, Director of HR and Operations

**Dr Risa Blair** is Passionate leader and trainer with extensive experience in higher education and corporate settings, including project management, curriculum development and delivery for face-to-face and online settings. She has exceptional skills in facilitating content delivery to meet the needs of the client. She is a strong proponent of utilizing real world experience and technology to promote and reinforce learning, as well as to meet required outcomes. She is easily able to deliver technical content to non-technical audiences. Quality Matters trained online course reviewer.



**Dr. Suzanne Lunsford, USA,** Wright State University, Professor of Chemistry

**Dr. Suzanne Lunsford** is a professor at Wright State University and is an electrochemist and an internationally established chemical educator. She has been working with colleagues from *international* universities on how to integrate interdisciplinary science labs to meet the needs of the 21<sup>st</sup> century. Her research work for over two decades has been developing novel sensor electrodes (modified electrochemically) to detect common neurotransmitters to detecting common heavy metals Lead, Cadmium, Mercury and toxic metal Indium at low concentrations utilizing electrochemistry techniques such as cyclic voltammetry, square wave anodic stripping voltammetry, and differential pulse voltammetry. The electrochemical techniques and modified electrodes are examined further by such techniques as Scanning Electron Microscopy, Atomic Force Microscopy, Fourier Transform Infrared Spectroscopy and Raman Spectroscopy to confirm the electrode surface interactions and stability analysis of the sensor(s) developed to assist our students with a variety of analytical instrumentation techniques. She has received over

1 million dollars in external funding for her international and local educational inquiry-based science research programs at Wright State University.

Dr. Suzanne Lunsford has a large experience in relating and integrating research, education and real life problem solving. She 1) has a systemic *perspective of academic activities* and 2) frequently has shown how the level of education may be increased when it is related to her research activities. This allowed her to increase the educational dimension in her teaching activities, which (in her case) are not reduced to a mere instructional process. The latter is *necessary*, but not *sufficient* in Education, including Higher Education. Research may be taken as a means for inquiry-based learning, especially if it is oriented to solve real life problems. This is what Dr. Lunsford has been doing for many years. (Additional note added by the conference organizers, because it is highly related to her plenary keynote address)

**Participative Panel on: “*Online Education and Communication: COVID-19 - the Elephant in the Room*”**

**Abstract:** Due to the onset and continuous evolution of the different strains of COVID-19, faculty members and students are challenged to make education work in the online environment. There are multiple scenarios with which all parties concerned need to cope to bring the same level of quality in teaching to the online or hybrid scenarios. The first scenario, of course, that requires the most change and innovation is restructuring courses that are typically taught 100% in the face-to-face environment and converting them rapidly to fully online or hybrid courses. The next scenario is working with existing online courses, yet making accommodations for the current situations with which students are dealing. The third scenario is a container that incorporates alternative formats for students from modular competency-based course components to hybrid-flex courses. Professors are challenged across the board in all scenarios to effectively facilitate student learning and to equally meet the students’ and institutions’ requirements. Students expect to graduate on a timely basis. There can be no delay. Faculty members need to receive compensation for their efforts. Even the pure online courses are severely impacted for faculty and students due to COVID-19. Professors have had to walk the tightrope to make accommodations to keep students active in the classes, to engage students, to hold students accountable for the quality of the work submitted, and to keep them optimistic about their outlook toward future graduation. The bridge that makes the connection with students includes a combination of intentional and thoughtful use of communication and the implementation of innovative technologies. The participative panel discussion will explore topics (communication and technology) related to meeting students’ needs, showing empathy, providing a quality learning experience for all students, addressing required course outcomes, and being flexible at this most difficult time in history.

**10:40 AM – 11:20 AM**

## **Host and Moderator**



**Ms. Alina Chiriac (Matei)**, MSc. and Doctoral Student, Romania, Doctoral School of Accounting, University of Economic Studies in Bucharest

My name is Alina CHIRIAC (MATEI) and I am an Anti-Fraud Inspector for the Regional Anti-Fraud Directorate 2 Constanța in Romania, with 7 years of professional experience behind. I am a civil servant and one of the main duties of my job is identifying tax fraud and fighting against it. I am also a PhD student at the Bucharest Academy of Economic Studies, and the research topic is called: "The fiscal ramifications of fraud.

Bringing to the surface the gray economy and its influence on fair competition and the national budget." I graduated from both Spiru Haret University in Bucharest, Faculty of Financial Accounting Management, specialization Accounting and Management Informatics, with a bachelor's degree in economics, and Ovidius University in Constanța, Faculty of Law and Public Administration, Law Specialization in 2020 with a bachelor's degree in law. In 2012 I graduated from a master's program in accounting at Ovidius University in Constanța. I am a suspended authorized mediator and I have attended numerous training and professional development courses.

### **Conversational Session on: *Fraud, A Multidisciplinary Element***

This conversational session aims to present fraud as a multidisciplinary element. The topic is of real interest to both theorists and practitioners in most fields and disciplines, due to the controversial nature and divergence of views in national and international literature. In order to reduce the impact of the phenomenon called "fraud" in our lives, we must include ethical education in our curriculum from an early age. It is already too late to meet the word "ethics" for the first time during university years or while admitting to a profession. As an exemple, when you give the child a reward (I will take you to the playground) in exchange for a service (you clean your room), but the child does not fully fulfill the task and yet he receives the full reward, the child understands that he can "fraud" household duties and he can get the benefits even without a work propotional with the reward.

A simple search for the word "fraud" in an international database, such as the Web of Science, will show you that there are as many results as they are diverse. Thus we encounter: electoral fraud, sports fraud, education fraud, bank fraud, medical fraud (in Romania, it was discovered a doctor with a false diploma who practiced for several years, so in this case we have both fraud in education and in medicine and sometimes fraud is like a domino), fraud in the public system, tax fraud, etc. The main purpose of this conversational session is to debate the subject by professionals working in different fields, in order to establish the common elements of the phenomenon. The results should reveal practical solutions to curb this phenomenon. Also, the implications of the results are that all actors can outline an overview of the phenomenon, but especially that they reveal the gaps that need to be changed

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***Conversational Sessions and/or Participative Panels, Tuesday, March 9<sup>th</sup>, 2021***

**AFTERNOON (Spanish/Portuguese)**

**12:00 M – 12:40 PM**

**“Host” y Moderadora**



**Dra. Elena Fabiola Ruiz Ledesma**, México, Instituto Politécnico Nacional. Escuela Superior de Cómputo.

**La Dra. Elena Fabiola Ruiz Ledesma** Colegiada del Departamento de Posgrado y Profesor de matemáticas en Ingeniería en la Escuela Superior de Cómputo del Instituto Politécnico Nacional. México.

Grado máximo de estudios: Doctorado en Ciencias. Especialidad Matemática Educativa. Egresada del CINVESTAV-IPN. 1998-2002.

**Estudios Previos:**

Maestría en Ciencias. Especialidad Matemática Educativa. Egresada del CINVESTAV-IPN. 1992-1994.

Licenciatura en Matemáticas. Escuela Superior de México 1985-1991

**Otros Estudios**

- A) Diplomado en Formación Docente. Realizado en el IPN.
- B) Diplomado en Didáctica de las matemáticas para la Ingeniería. *México, D.F y Francia, Lyon. Noviembre 2005- Julio 2006.*
- C) *Escuela de Verano: Matemáticas para Ingenieros: Finalidades, Contenidos y Prácticas Pedagógicas.* Realizado en Lyon, France. 26 de junio – 13 de julio de 2006.

Participación como directora de proyectos de investigación educativa desde 2006 hasta la fecha  
Autora de Artículos en revistas internacionales y nacionales.

Participación en Congresos Nacionales e Internacionales.

Miembro del sistema Nacional de Investigadores Nivel 1

**Sesión Conversacional sobre: “El papel de la tecnología en los sectores: Educativo, económico y científico durante la pandemia por COVID-19”**

**Co-moderadoras: Dra. Lorena Chavarría Báez y Dra. Rosaura Palma Orozco**

**Resumen:** Durante el segundo semestre del año 2020 se dieron grandes cambios a nivel global, a consecuencia de la propagación del virus SARS-CoV-2. México, al igual que los demás países del mundo, mantiene las medidas sanitarias pertinentes para la restricción de actividades en el sector educativo, económico y social. De estas medidas, la principal es el confinamiento en casa, y se aplica con el fin de contener la propagación del coronavirus. Todos los sectores se han visto afectados por esta restricción, ya que muchas actividades tuvieron que ser pospuestas o canceladas, aunque otras dieron continuidad de una forma distinta. Por un lado, las instituciones del sector educativo buscaron la forma de sustituir las clases presenciales por clases en línea, empleando plataformas educativas, salas virtuales y recursos educativos digitales, con el fin de que el semestre escolar se pudiera concluir y dar continuidad a la vida académica. En el sector laboral hubo muchos despidos y cierres en restaurantes, agencias turísticas, tiendas de ropa. Los comercios que lograron mantenerse fue gracias a la tecnología, en este caso nos referimos al e-commerce, ya que la mayoría de las personas empezó a realizar sus compras en línea, haciendo uso de diferentes aplicaciones tecnológicas, los pagos de tarjetas de crédito y en general las transacciones se hicieron vía internet. La tecnología cobró tal importancia que la gente de diferentes edades tuvo que adaptarse y aprender a usarla.

En este panel participativo se presentarán 10 panelistas quienes abordarán trabajos de investigación sobre el empleo de la tecnología para apoyar diversas situaciones que enfrentamos en distintos campos durante la pandemia por COVID-19.

**12:40 M – 1:20 PM**

**“Host” y Moderador**



**Profesor Andres Tremante**, EE. UU., Florida International University, Director del Center for Diversity and Student Success en la Facultad de Ingeniería y Computación

**El profesor Andrés Tremante** es el nuevo director del Centro para la Diversidad y el Éxito Estudiantil de la Facultad de Ingeniería y Computación (CD-SSEC). En este puesto, el Dr. Tremante es responsable de todos los aspectos de los programas K-12 de la universidad y las actividades STEM preuniversitarias, trabajando en estrecha colaboración con los asesores universitarios y los decanos asociados para mejorar el éxito de los estudiantes, las tasas de graduación y retención y en el avance de la misión de la Universidad. También apoyará los programas cooperativos entre la industria y la universidad y las áreas de diversidad e inclusión del ERC para PATHS-UP y CELL-MET. También es subdirector del Área de empuje de la cultura de inclusión de CELL-MET.

El profesor Tremante recibió su licenciatura en ingeniería mecánica de la Universidad Simón Bolívar y su doctorado de Arts et Métiers Paris Tech. Se unió a FIU en 2008 después de 25 años

de experiencia en Europa y América Latina, principalmente en la academia y la industria petrolera. Aporta un largo historial de enseñanza, investigación académica, servicio académico y sólidas credenciales de liderazgo como director de CD-SSEC.

**Panel Participativo sobre: “Un Programa de Comunicación Interdisciplinaria a través de temas trans-disciplinarios en Ingeniería y Computación”**

"A través de subvenciones corporativas de varias organizaciones, el Centro para la Diversidad y el Éxito Estudiantil en Ingeniería y Computación" (CD-SSEC, por sus siglas en inglés) está lanzando el programa "Oportunidades de Investigación de Pregrado y becas" (OURS, por sus siglas en inglés). La misión de OURS es fomentar una cultura de excelencia en investigación dentro de la Facultad de Ingeniería y Computación en la Universidad Internacional de le Florida (FIU, pos sus siglas en inglés) que está comprometida a promover oportunidades para todos los estudiantes, especialmente aquellos de poblaciones sub-representadas y entornos desfavorecidos. Un modelo de programa de múltiples niveles con incentivos financieros que fomenta temas transdisciplinarios en Ingeniería y Computación, estudios basados en proyectos y oportunidades laborales relacionadas con el plan de estudios, lo que reduce en gran medida la necesidad de que los estudiantes encuentren trabajos fuera del campus que no se alinean con sus metas profesionales a largo plazo. El éxito se medirá a través de la retención de estudiantes, las tasas de graduación, la inscripción y la colocación de posgraduados. Adoptamos nuestro entorno multicultural, la comunicación interdisciplinaria y la diversidad de pensamientos, creencias e ideas. Incorporamos métodos de enseñanza y aprendizaje científicos basados en evidencia en nuestros servicios y programas. Aspiramos a la innovación, la creatividad, el ingenio, la equidad y la inclusión"

**1:20 PM – 2:00 PM**

**“Host” y Moderador**



**Profesor Abel Suing**, Ecuador, Universidad Técnica Particular de Loja, Departamento de Ciencias de la Comunicación, Grupo de Investigación: Comunicación y Cultura Audiovisual (GICA)

**El Profesor Abel Suing** es docente e investigador del Departamento de Ciencias de la Comunicación de la Universidad Técnica Particular de Loja (UTPL) donde actualmente coordina la Maestría en Comunicación mención investigación y cultura digital. Investigador acreditado por Secretaria Nacional de Educación Superior Ciencia, Tecnología e Innovación del Ecuador - REG-INV-18-03088. Licenciado en economía por la UTPL. Doctor en Comunicación por la Universidad de Santiago de Compostela. Coordinador del Grupo de Investigación Comunicación y Cultura Audiovisual (GICA). Integrante de las Redes de investigación INAV y RICE. Socio de la Unión Nacional de Periodistas de Ecuador. Líneas de investigación: Televisión, Políticas de comunicación, Libertad de expresión, Educación superior.

## Sesión Conversacional sobre “Ética y regulación en la sociedad del conocimiento”

En 2021 la libertad de expresión, que es una condición de las democracias, enfrenta el riesgo de ser limitada frente las políticas de salud en Covid-19 y por acciones de los administradores de las plataformas de redes sociales. Frecuentemente eran los gobiernos autoritarios y los grandes propietarios de medios de comunicación a través de monopolios u órganos de regulación con poca diversidad quienes ponían obstáculos para el ejercicio de los derechos de la comunicación. El propósito de la mesa de reflexión es conocer de experiencias y casos relacionados, o potencialmente condicionados, con la reducción de las libertades de recibir y emitir información por cualquier medio o mecanismo, como lo establece el Art. 19 de la Declaración Universal de los Derechos Humanos.

**2:00 PM – 2:40 PM**

### “Hosts” y Moderadoras



**Profesora Ariana Acón Matamoros**, Costa Rica, Directora de la Cátedra Tecnologías de Información y Comunicación y de la Universidad Estatal a Distancia

La Ing. Ariana Acón Matamoro es profesora en la carrera de Ingeniería de Computación y Coordinadora del área Tecnologías de Información y Comunicación e Ingeniería de la Carrera Ingeniería Informática de la Universidad Estatal a Distancia de Costa Rica. También es profesora de la Maestría en Gestión de la Calidad en la Educación Superior. La profesora Ariana Acón Matamoros es graduada en Ciencias de la Computación, con énfasis en Desarrollo de Aplicaciones Computacionales, y tiene un Máster en Gerencia de Negociaciones Internacionales. Tiene un importante número de publicaciones y de ponencias en conferencias internacionales. Ha sido invitada a presentar trabajos a audiencias multi-disciplinaria con el objetivo de fomentar la comunicación inter-disciplinaria. email: [aaconm@uned.ac.cr](mailto:aaconm@uned.ac.cr)



**Dra. Aurora Trujillo Cotera**, Costa Rica, Coordinadora del área de Autoevaluación del Instituto de Gestión de la Calidad (IGESCA) de la Universidad Estatal a Distancia

La profesora Aurora Trujillo Cotera es doctora en Educación con énfasis en Mediación Pedagógica. Máster en Curriculum y Docencia Universitaria. Licenciada en Odontología. 20 años de experiencia en docencia universitaria y 15 años de experiencia en procesos de autoevaluación y acreditación de carrera en educación superior. La Dra. Aurora Trujillo Cotera es actualmente evaluadora en el Programa de Autoevaluación Académica dando asesoría y acompañamiento a carreras de la Escuela de Ciencias de la Educación y a programas del Sistema de Estudio de Posgrado (SEP), Es Lectora de Trabajos Finales de Graduación en las Maestrías de Educación a Distancia y Psicopedagogía,

y participante en proyectos de Investigación en la Dirección de Extensión y en la elaboración de diseños curriculares en la Dirección de Extensión.

### **Sesión conversacional sobre: "El papel de la tecnología en los Educación Superior"**

**Resumen:** La educación superior se caracteriza por ser autónoma y enfocada en las estrategias metodológicas que permitan al estudiante construir su propio aprendizaje. La planificación del tiempo y actividades docentes como pilar fundamental en la academia.

¿Considera importante la interacción entre disciplinas en los procesos de la educación superior? La labor de las universidades además de preparar futuros profesionales según los perfiles requeridos, también se centra en la docencia, investigación y extensión, para apoyar a las comunidades y personas que no necesariamente son estudiantes, de ahí nace la cooperación entre disciplinas que se complementan.

¿Está de acuerdo con que el proceso que permite la aparición de nuevos campos del conocimiento necesita la transdisciplinariedad?

Sin embargo, en los tiempos actuales, el apoyo de la tecnología es indispensable para poder cumplir con los objetivos y metas propuestas en la educación superior. La infraestructura tecnológica apoya desde los procesos de divulgación, matrícula, entrega de docencia, mediación pedagógica virtual, mejoramiento continuo, evaluación y rendición de cuentas.

¿Cómo apoya o fomenta la tecnología a la transdisciplinariedad en donde se utiliza el mismo método de investigación?

¿Puede usted compartir estrategias metodológicas en la aplicación de la tecnología en sus actividades docentes, de investigación o extensión (actividad académica)?

**2:40 PM – 3:20 PM**

### **“Hosts” y Moderadores**



**Profesora Liliana González Palacio**, Colombia, Universidad de Medellín, Grupo de Investigación ARKADIUS

**La Dra. Liliana González Palacio** es docente de pregrado y posgrado, Investigadora Asociada – COLCIENCIAS, quien ha liderado (o participado) en varios proyectos de investigación relacionados con educación en ingeniería, algunos de ellos se enuncian a continuación: (1) Estrategia de intervención didáctico-curricular para la formación en robótica y programación en instituciones de educación media-básica (2018) y (2) Herramienta adaptativa de gestión de aprendizaje basado en problemas para potenciar el trabajo colaborativo en cursos virtuales a nivel universitario (2019). Además, ha dirigido 8 proyectos de investigación (pregrado, maestría y doctorado) enfocados en la aplicación de TIC en el ámbito de la educación superior. Cuenta con productos de divulgación

y generación de conocimiento en la línea de educación en ingeniería. Tiene experiencia en el desarrollo de proyectos de aula en el marco de cursos de ingeniería involucrando empresas del sector (Globant, Sequal, Tech and Solve, PSL).



**César Fabián Cadavid Grajales**, Colombia, Consejo Profesional Nacional de Ingeniería, Profesional especializado

Administrador de negocios y economista de la Universidad EAFIT, posgrado en gerencia de proyectos de la misma universidad y en gerencia de mercadeo de la Universidad EAN.

Amplia experiencia en investigación y análisis de mercados en el sector de tecnología a nivel Latinoamérica así caracterización e implementación de proyectos de impacto social en zonas rurales dispersas en varias regiones del país con el apoyo y recursos de multinacionales.

Actualmente se desempeña como asesor de Dirección General en el Consejo Profesional Nacional de Ingeniería donde se lideran los procesos de divulgación y relacionamiento interinstitucional con empresas, entidades e instituciones cuya actividad económica sea inherente a la ingeniería.

### **Sesión Conversacional Sobre: “*La Ética Profesional en el Ejercicio de la Ingeniería*”**

**Resumen:** Desde sus inicios, la ingeniería asumió el reto de transformar el mundo para beneficio del hombre. Su ejercicio profesional es vital para el desarrollo de las naciones. Los profesionales de la ingeniería tienen una carga de alto impacto social, ambiental, técnico y económico.

El profesional debe estar consciente de que cada una de las decisiones, invenciones y ejecuciones conllevan una responsabilidad ética, por el incremento de las exigencias de los grupos de interés, las exigencias de transparencia y responsabilidad, el incremento de las regulaciones, las normativas y mejores prácticas, el incremento de la presión competitiva y la nueva dimensión de valor que ha tomado el capital humano en el escenario de lo ambiental, social, técnico e industrial.

El ámbito profesional se visualiza como un entorno altamente complejo, especialmente cuando factores externos generan cambios abruptos en la dinámica social y económica, como la emergencia sanitaria provocada por el COVID. Este panel busca ser un espacio de discusión de las situaciones y escenarios asociados al ejercicio de la ingeniería.

**3:20 PM – 4:00 PM**

### **“Hosts” y Moderadoras**



**Profesora Fanny Yolanda Paladines Galarza**, Ecuador, Universidad Técnica Particular de Loja, Departamento de Ciencias de la Comunicación

**La Fanny Yolanda Paladines Galarza** es Profesora del componente de Publicidad en las titulaciones de Relaciones Públicas y Comunicación Social. Profesora de la Maestría en Comunicación Estratégica mención Comunicación Digital.

Licenciada en Publicidad en la Universidad Tecnológica Equinoccial (Quito-Ecuador). Diploma Superior en Gerencia Estratégica de Mercadeo, Diploma Superior en Gerencia Estratégica del Desempeño Empresarial, Máster Executive en Dirección y Gestión de Marketing Estratégico en la Escuela de Negocios (EOI) Madrid-España. Ph.D en Comunicación y Periodismo por la Universidad Santiago de Compostela de España.

Forma parte del Grupo de Investigación Gestión de Comunicación Estratégica de la UTPL y de la Asociación de Investigadores en Relaciones Públicas -AIRP-.

Ex Directora del Área de Marketing de la UTPL, miembro del equipo de calidad de las titulaciones de Relaciones Públicas y Comunicación Social de la UTPL. Actualmente Coordinadora de la Titulación de Relaciones Públicas. Investiga y escribe en revistas científicas Scopus, ISI, Latindex, libros, divulgativos y más, temas relacionados con la marca/branding, marca digital, gestión de la marca en redes sociales, publicidad, marketing, comunicación estratégica/corporativa; comunicación tradicional y digital, comunicación política, turística, de crisis, etc.



**Profesora Karina Paola Valarezo González, Ecuador.** Universidad Técnica Particular de Loja. Departamento de Ciencias de la Comunicación

**La Dra. Karina Paola Valarezo González** es docente investigadora titular de la misma Universidad. Es Licenciada en Relaciones Públicas por la Universidad Tecnológica Equinoccial, Quito, Ecuador. Doctora-PhD en Comunicación y Periodismo por la Universidad Santiago de Compostela, España. Ex asesora del Congreso de Diputados de la República del Ecuador en temas de comunicación. Profesora titular de grado y postgrado de las asignaturas de Relaciones Públicas, Gestión y Planificación de las Relaciones Públicas, Responsabilidad Social Empresarial, Planificación y Evaluación de la Comunicación. Investigadora, ha publicado artículos en revistas indexadas; autora de capítulos de libros revisados por pares académicos; directora de proyectos de investigación; ponente en diferentes eventos académicos y de investigación.

### **Sesión Conversacional sobre: “Desarrollo Sostenible y Comunicación Digital Estratégica”**

Todos los países del mundo necesitan afrontar los grandes desafíos a los que se enfrenta la humanidad y garantizar que todas las personas tengan las mismas oportunidades y puedan llevar una vida mejor sin comprometer nuestro planeta.

Dejar un mundo sostenible para las próximas generaciones es un tema que inmiscuye a todos. La pandemia de la COVID-19, mostró la urgencia de transitar de un modelo económico lineal a un modelo circular, pasando de patrones de consumo y producción tradicionales, hacia nuevos modos que incluyan conciencia ambientalmente responsable (Naciones Unidas, 2020).

Por otro lado, La **comunicación estratégica digital** es un eje transversal que puede aportar significativamente con las nuevas tecnologías como apoyo a la conciencia y al desarrollo sostenible del planeta. Los consumidores que se encuentran en el entorno digital, de manera especial los considerados millennials y centennials están estrechamente relacionados con la interacción y las recomendaciones son parte de su proceso de toma de decisiones al comprometerse con el entorno y al tomar decisiones de compra o de consumo basados en lo que representa una orientación correcta que nos lleve al desarrollo sostenible.

La educación también juega un papel importante pues estas audiencias deben estar completamente formadas y preparadas para generar un desarrollo sostenible aprovechando la era tecnológica y digital.

**4:00 PM – 4:40 PM**

#### **“Host” y Moderadora**



**Profesora Victoria Eugenia Ospina Becerra**, Ph.D., Colombia , Escuela Colombiana de Ingeniería Julio Garavito; lider en la Escuela del proyecto de Investigación financiado por la Union Europea Erasmus+ Cap4city.

**La Profesora Victoria Eugenia Ospina Becerra** tiene Doctorado en Redes, Conocimiento y Organizaciones por la Universidad Tecnológica de Troyes (Francia). Máster en Redes, Conocimiento y Organizaciones en la Universidad Tecnológica de Troyes (Francia).

Especialista en construcción de software de la Universidad de Los Andes (Colombia) e Ingeniero de Sistemas de la Escuela Colombiana de Ingeniería Julio Garavito.

Victoria Eugenia es Profesora Asociada de la Escuela Colombiana de Ingeniería Julio Garavito. Las áreas especiales de interés incluyen Ciudades Inteligentes, Gestión del Conocimiento, Gestión de Proyectos de Tecnología de la Información, Arquitectura Empresarial, Software Halthcare, innovación social, entre otras.

Es líder en la Escuela del proyecto de Investigación financiado por la Union Europea Erasmus+ Cap4city. <https://www.cap4city.eu> Fortalecimiento de las Capacidades de Gobernanza para ciudades Sostenibles e Inteligentes con 8 universidades latinoAmericanas y 4 Europeas.

Es Directora del grupo de investigación CTG-Informática de la Escuela Colombiana de Ingeniería Julio Garavito. PMP®. Profesional certificado y Miembro del Project Management Institute PMP®.

### **Sesión Conversacional Sobre “*Ciudades Inteligentes*”**

Una ciudad inteligente está basada en tres pilares fundamentales: el factor social, el económico y el ambiental, todo soportado sobre el estudio e innovación constante en infraestructura urbana para mejora de la calidad de vida gracias a las buenas prácticas de gobernanza que el territorio implementa al conocer sus oportunidades y amenazas.

Una ciudad inteligente se desarrolla a partir de la innovación digital en servicios con demanda urbana, que busca incrementar las ventajas competitivas y el bienestar de la comunidad (OCDE, 2020). Está basada en tres pilares fundamentales: el factor social, el económico y el ambiental. Las ciudades inteligentes combinan, datos, información y conocimiento para desarrollar políticas públicas y acciones empresariales ajustadas a las necesidades específicas de los ciudadanos. Adaptando las características de la ciudad, la cultura, la infraestructura y las dinámicas sociales.

El factor económico se comprende en una dimensión colaborativa, el sector productivo toma decisiones a nivel local mediante la cocreación, coproducción, está centrado en ofrecer los servicios que realmente quieren los usuarios, desarrolla bienes y servicios de acuerdo con los gustos de los usuarios y los puede recopilar a partir de la comunicación participativa y multiplataforma con el ciudadano. La relación entre universidad, empresas, gobierno, personas experimenta un ascenso a partir del acceso a los datos e información abierta, transparente y colaborativa, que permite el desarrollo de nuevos productos y servicios basados en información.

La inversión pública y el desarrollo de la infraestructura urbana se integran mediante la planeación de la política pública a partir del análisis de información en tiempo real y geolocalizada, para entender las problemáticas locales y dar respuesta en el menor tiempo posible.

El desarrollo de las ciudades se construye a partir de la combinación de factores como la transformación tecnológica, el capital social, intelectual y económico. Y se caracteriza según los aspectos ambientales, culturales, sociodemográficos y las dinámicas sociales y empresariales de cada ciudad. La innovación en sectores estratégicos como las telecomunicaciones, la conectividad, el internet de las cosas, el desarrollo de la ciencia, la salud y nuevos usos de fuentes de energía, tienen un impacto global y se convierten en determinantes del cambio tecnológico en todos los aspectos de la vida de las personas, gobiernos y empresas.

La crisis de salud pública del covid 19 en el 2020 dejó entrever los beneficios del diseño de ciudades inteligentes, ya que, en una coyuntura de distanciamiento físico, la tecnología desempeñó un papel fundamental en la interacción humana, en la continuidad y provisión de servicios públicos y privados. Y aceleró a pasos agigantados la transformación digital en sectores productivos que se resistían a la inmersión digital.

Desde 2015 la Organización de Naciones Unidas (ONU) desarrollo una agenda común entre las naciones para encauzar las acciones hacia el bienestar de todos los ciudadanos en el mundo, los Objetivos de Desarrollo Sostenible (ODS) con un horizonte hacia el año 2030, enmarcan los principales retos y necesidades de cambio en nuestra sociedad y plantean el diseño de ciudades inteligentes para responder estratégicamente y con el uso de la tecnología, la información y el conocimiento a problemáticas como el fin de la pobreza, la mortalidad infantil, el analfabetismo digital, la discriminación y desigualdad en las oportunidades. Entre otras necesidades sociales que abarcan los 17 objetivos propuestos.

**4:40 PM – 5:20 PM**

### **“Host” y Moderadora**



**Dra. Bertha Ulloa Rubio**, Perú, Universidad César Vallejo (UCV), Decana de ingeniería y Directora de Programa académico de Investigación y de investigación docente actual de UCV

**La Dra. Bertha Ulloa Rubio** tiene competencias en las siguientes líneas: académica, investigadora y administrativa cuento con un Dr. Administración de la Educación, Maestría en Ingeniería de Sistemas y Computación UFRJ – Brasil, Doctorado (e) en Ing. de Producción UENF-Brasil, Doctorado (e) en Ing. de Sistemas - UNFV- Lima experiencia como académica Docente Universitario: Ex docente e investigadora Universidad Estadual do Norte Fluminense – Brasil, Ex docente Universidad Nacional de Ingeniería, Ex docente Universidad Nacional Mayor de San Marcos y como administrativa directora de Ing. de Sistemas, decana de ingeniería y Directora de Programa académico de Investigación y de investigación docente actual de UCV- Perú logro obtenido reciente mente haber sido nombrada por el CONSEJO NACIONAL DE CIENCIA Y TECNOLOGIA CONCYTEC de Perú docente investigadora RENACYT, cuento con varios libros y artículos relacionados con sistemas. Mi hobby es liderar equipos de investigación.

### **Sesión virtual conversacional sobre “Tendencias de la Universidad del futuro”**

**Resumen:** La presente propuesta para sesión virtual conversacional es motivada y causada por la pandemia nos condujo a realizar en las universidades cambios radicales acelerados y enfrentar nuevos retos estructurales a los stakeholders me refiero a los estudiantes, profesores, personal administrativo y personal directivo de las universidades en comportamiento y ejecución de toma de decisiones para realizar las actividades académicas y administrativas teniendo que cumplir con su misión que es formar personas muchas veces sin tener en cuenta las condiciones físicas, tecnológicas y humanas. Ello lleva a proponer tendencias de la universidad teniendo en cuenta un análisis, reflexiones profundas y críticas del sistema complejo universidad. Por ello es repensar en el nuevo Modelo de: organización, de Gestión, Currículo flexible interconectado con otras universidades donde los estudiantes elijan libremente lo que desean aprender y los maestros también compartir conocimiento, saberes y experticia con otras universidades.

**5:20 PM – 6:00 PM**

## **“Host” y Moderador**



**Prof. Eduardo Amadeu Dutra Moresi**, Brazil, Universidade Católica de Brasília

**Dr. Eduardo Amadeu Dutra Moresi** concluiu o Curso de Intendência da Academia Militar das Agulhas Negras (AMAN) em 1981. Em 1989, concluiu a graduação em Engenharia Eletrônica pelo Instituto Militar de Engenharia. Em 1994, concluiu o Mestrado em Engenharia Elétrica pela Universidade de Brasília, com foco em classificação automática de imagens de satélites empregando redes neurais. Em 2001, concluiu o Doutorado em Ciência da Informação pela Universidade de Brasília, com foco em Teoria da Complexidade e Inteligência Organizacional. Atualmente, é professor da Universidade Católica de Brasília, onde atua como docente do Mestrado Profissional em Governança, Tecnologia e Inovação e do Mestrado e Doutorado em Educação. Desde dezembro de 2013, coordena o Programa Apple Developer Academy da UCB, que capacita estudantes de graduação no desenvolvimento de aplicativos inovadores para a plataforma iOS. A partir de 15/10/2012, assumiu o cargo de Assessor Técnico no CGEE - Centro de Gestão e Estudos Estratégicos, onde atua em projetos de Inteligência em Ciência, Tecnologia e Inovação.

### **Sessão de conversação: “*Bibliometria, cientometria e interdisciplinaridade*”**

Interdisciplinaridade se refere ao processo de ligação existente entre duas ou mais disciplinas. Possibilita o diálogo entre as diversas disciplinas, fazendo entender o saber como um todo e não como partes fragmentadas. Por outro lado, o crescimento exponencial da literatura científica e dos diversos tipos de informação divulgados em meios físicos e digitais tornaram os estudos métricos da informação mais atraentes, propiciando o crescimento do seu uso e viabilizando a relevância de técnicas e métodos como a bibliometria, a cientometria e a informetria, além de outras métricas. A bibliometria tem como objetos de estudo os livros e as revistas científicas, cujas análises se vinculam à gestão de bibliotecas e bases de dados. A cientometria preocupa-se com a dinâmica da ciência, como atividade social, tendo como objetos de análise a produção, a circulação e o consumo da produção científica. A informetria, por sua vez, abarca as duas primeiras, tendo desenvolvido métodos e ferramentas para mensurar e analisar os aspectos cognitivos da ciência. O objetivo desta sessão é explorar o potencial da bibliometria e da cientometria para a interpretação da literatura científica em um contexto interdisciplinar.