Guest Editor:

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

Co-Editors

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

Fr. Dr. Joseph R. Laracy, **USA,** Seton Hall University, Department of Systematic Theology & Department of Mathematics and Computer Science

Dr. Nagib Callaos, USA, Founding President of the International Institute of Informatics and Systemic (IIIS, www.iiis.org) and Former Dean of Research of the University Simon Bolivar.

First Step: Abstract (300-600 Words) Submission via
http://www.iiisci.org/Journal/SCI/subabstract/subabstract.asp. The following are the deadlines for all the steps.

Second Set of Deadlines

1. February 10, 2021: Abstracts (300-600 Words) submissions, via
http://www.iiisci.org/Journal/SCI/subabstract/subabstract.asp. Abstracts will be accepted or not in the following 48 hours after their reception, if you also send an email to jsci@mail.iiisci.org informing that you sent an abstract to the Special Issue on "Cybernetics and Philosophy". Otherwise, you would receive the notification later.

2. **March 1st, 2020**: Full paper submission (2000-5000 words)

3. **March 30th, 2021:** Acceptance notifications

4. **March 15, 2021:** Upload of the final Version

5. **April 30, 2021:** publication of the Special Issue.

Article Processing Charge (APC)

Call for Reviewers:

Any researcher, scholar, Educator, or professional who is willing to support the reviewing process may send an email, addressed to iiis-c@outlook.com, with her/his present title, first and last name, affiliation, and email, along with a short Bio (100-300 words)

Potential Non-Exclusive Topics

- Philosophy of Cybernetics, e.g., Applying Philosophy to Cybernetics, Philosophical Cybernetics.
- Cybernetics Philosophy, e.g. Applying Cybernetic concepts and notions to philosophical thinking and potential theories, as well as for reinterpreting and enriching the meaning of philosophical schools and writes.
- CyberPhilosophy: Intersection between Philosophy and Cybernetics.
- Cybernetics and Metaphysics
- Cybernetics and Epistemology
- Cybernetics and Ethics
- Cybernetics and Ontology
- Cybernetics and Ethics
- Cybernetics and Philosophy of Science
- Cybernetics and Philosophy of Mind
- Cybernetic notions as identified trough philosophical history.
- Philosophical notions identified as parts of Cybernetics or Philosophy of Cybernetics.
- Cybernetics implicit foundation in the works of a specific philosopher
- Cybernetics implicit foundation of a philosophical conception, school, or theory.
- Application of a specific Philosophy to enhance the conceptual and the notional bases of Cybrenetics.
- Relationships between Philosophy and Cybernetics.

Reviewing Methodology

The reviewing methodology will be the dual reviewing that the IIIS has applied, to the CONTENT of the submissions, since 2006, for the conferences it organizes, as well as for the regular issues of its journals. In the latter case, at least one additional FORM review is made. Each author should acknowledhe at least one peer-editor, in the first footnote placed on the first page of her/his article, and the non-annonimpus peer reviewers of the content of her/his paper. The dual reviewing methodology has been briefly described at http://www.iiisci.org/journal/SCI/PeerReviewMeth.asp?var, and the reasoning for the peer-editing has been provided in the 1½ pages appendix of the document on Quality Assurance posted in the home page of the journal, i.e., at www.iiisci.org/journal/sci/Quality-Assurance.pdf?var

The non-annonimous reviewers of the dual methodology that will be applied, is based on suggestion made by the highly referenced author, David Kaplan, in his short article entitled "How to fix Peer review" (More on this issue below).

As written above, the reviewing methodology will includethe following non-anonymous peer-reviews, as recommended by the highly referenced David Kaplan, in his article *"How to fix Peer Review"* (2005, the Scientist, https://www.the-scientist.com/opinion-old/how-to-fix-peer-review-48695), i.e., each author should have colleague (s) reviewing her/his full article. For the convenience of the reader, we are copying and pasting important paragraph of David Kaplan article which is explicitly directed to the authors:

> "***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."*** David Kaplan (2005). "How to Fix Peer Review", The Scientist, 19 [Italics and emphasis added]

Kaplan's solution to minimize peer-reviewing weaknesses proved pragmatically correct since the International Institute of Informatics and Systemics (IIIS) started applying a dual-methodology for peer review, based on Kaplan article since 2006. Since then it was evident the increase in the *effectiveness* of the IIIS peer-review. During this time, it was also evident the ethical and meta-ethical aspect associated with Kaplan suggested solution. Consequently, Kaplan's suggested solution support both: 1) an increasing *effectiveness* of peer review, and 2) an *ethical behavior* from the authors and support for the *meta-ethical responsibilities* of the organizers and editors. More details regarding the ***Ethical and Meta-ethical issues in peer reviewing*** can be found in the uncompleted and yet unedited article posted at http://www.iiis.org/contents/Ethics-and-Meta-Ethics-in-Peer-Reviewing.pdf

Reminder

Reviewers may recommend not to accept a good paper because the effort to be made by the reader due to ts inadequate legibility. When potential authors submit their abstracts, they are, simultaneously, expressing their commitment to write the full paper and to upload the final version of the full paper if it is accepted by the reviewers. *It is an ethical responsibility of any potential author to respect the time of the academics, researchers, and professionals who volunteered to review their respective paper.*
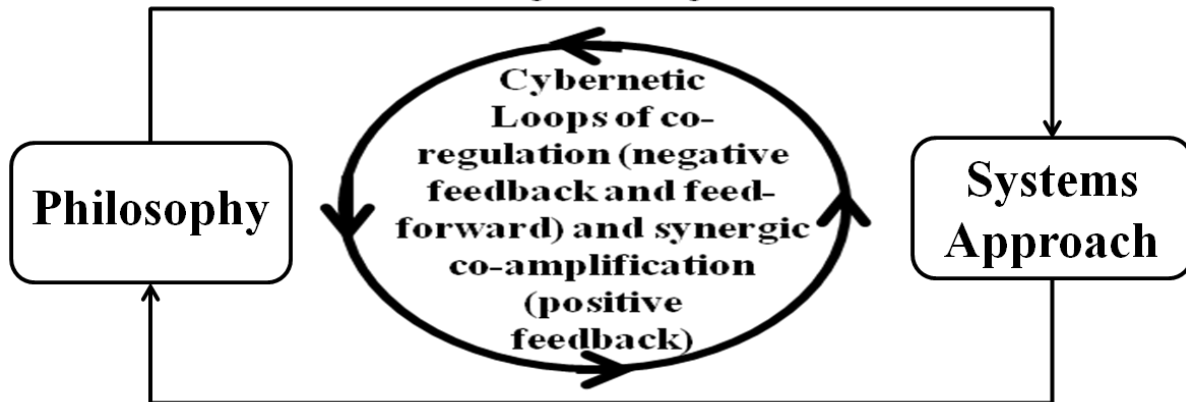
Purpose and Conceptual Background

The intersection between Philosophy and Cybernetics is increasingly growing. This may have been expected because the previous growing of the intersection between the Systems Approach that ended up in what was called Systems Philosophy, while the phrase "Philosophical Systems" had always been used to refer to different philosophical perspectives of different philosophers and their respective followed. For example, Google provides 720,000 results for the phrase, "philosophical system"; 44,000 results for "Hegelian system"; 34,400 results for "Aristotelian system"; 32,200 results for "Descartes system"; etc. Similarly, Google shows 141,000 results for "Philosophy and Cybernetics"; 131,000 results "cybernetics and philosophy"; 22,400 results "cybernetics philosophy"; 3,560 results for "cybernetic philosophy"; 3,040 results for "philosophical cybernetics"; 7,200 results for "philosophical cybernetics". This means that, in total, there are, **at least, 308,200 results provided by google for relationships between "Philosophy and Cybernetics"**

This may have been expected because Cybernetic Systems are on kind of Systems and, hence part of the intersection between "Systems and Philosphy". 388,000,000 results are found by Google just for the phrase "system approach and philosophy". The System approach was born as a consequence of the generalization of Cybernetics. Consequently, even Cybernetics was the historical antecedent of the Systems Approach and Systems Philosophy, it has been part of it in the last 50 years, at least, since Berttallanfy's (General System Theory: Foundations, Development, Applications, 1969), GST; which is an inter-disciplinary thinking and practice that studies and describes the interactions among the parts of a system and it is applicable to biological systems, cybernetics, and many other theoretical and practical fields. Furthermore, from a personal experience[1], we might suggest that there are cybernetic relationships between the Systems Approach and Philosophy (Figure 1) as well as between cybernetics and philosophy (Figure 2). The latter is between Philosophy and both First- and Second-Order Cybenetics

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[1] The author's first formal course on the system approach moved him to take five years of a post-Doc (full time) formal courses in Philosophy, which he effectively applied in his courses on General System Theory as well an in Information Systems and, even, in Software Engineering, He also applied a combination of philosophy, System Approach and Cybernetics to design and effective methodology in Information Systems Engineering and well as in Software Engineering in both the academic and the consulting domain, for at least 30 years. Consequently the author has a direct experience on the huge synergy that might emerge from an adequate combination of Philosophy and Systemics/cybernetics. A large books (about 650.000 words) was write about a General Systems Methodology that emerged from this huge synergy at both the thinking and the doing dimensions.

Trans-Disciplinary notions and understanding supports inter-disciplinary internal and external communication, hence analogical thinking which is a necessary input to any kind of logical thinking


Philosophy

Cybernetic Loops of co-regulation (negative feedback and feed-forward) and synergic co-amplification (positive feedback)

Systems Approach

Supports focusing in the relationships among the different philosophical systems allowing a holistic and comprehensive understanding of Philosophy, as a whole field and complex systems, instead of a set of sometime complicated philosophical systems of one thinkers and her/his followers. As frequently usual in complex whole, emergent properties may emerge adding synergies between these two intellectual fields , as well as between them and real life problems.

Figure 1: Cybernetic Relationships between the System Approach and Philosophy, which potentiate the emergence of important 1) synergies them via co-amplification and 2) possible meta-synergies with negative feedback (or feed-forward) providing reciprocal co-regulation between them as well as with them and real life problems.
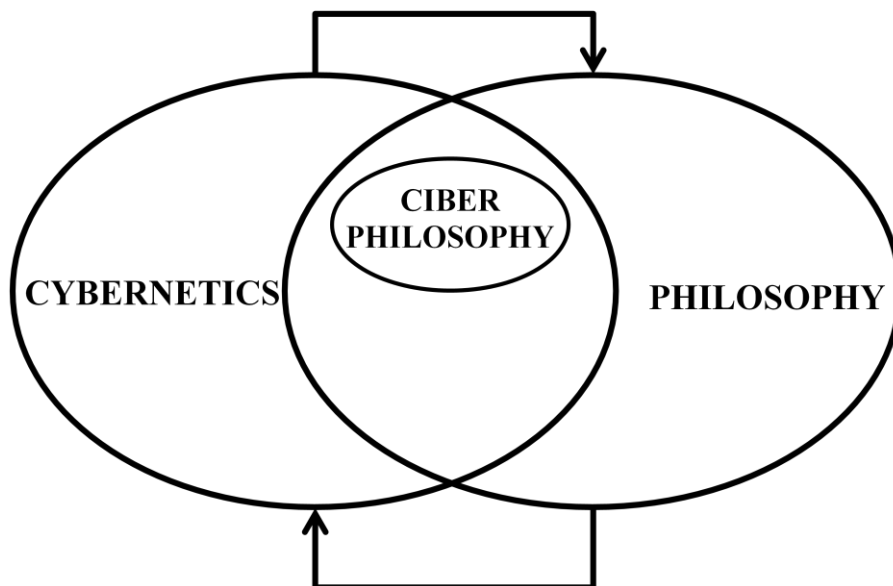
Notice, that in Figure 1 and 2, *Philosophy and Systemics/Cybernetics feedback reciprocally each other. It is not one directional feedback as it is the case of traditional cybernetics. Here, the regulator may also regulate the regulatee, as well.* Consequently, First and Second Order cybernetics, as part of Systemic, may provide input to Philosophy and Vice Versa, 1) via 1) co-regulation (negative bidirectional feedback and feed-forward) and 2) co-additive or co-amplificatory bidirectional positive feedback.

Consequently. A main purpose of this special issue is to show the intersection and/or the relationships between the fields of Cybernetics (including Second Order Cybernetics) and Philosophy. These relations may, in turn, be non-linear (Cybernetic) or linear ones (Figure 3). The importance of the linear one is that they may suggest to the reader non-linear one and, hence, foster more thinking and, even, research on this issue.
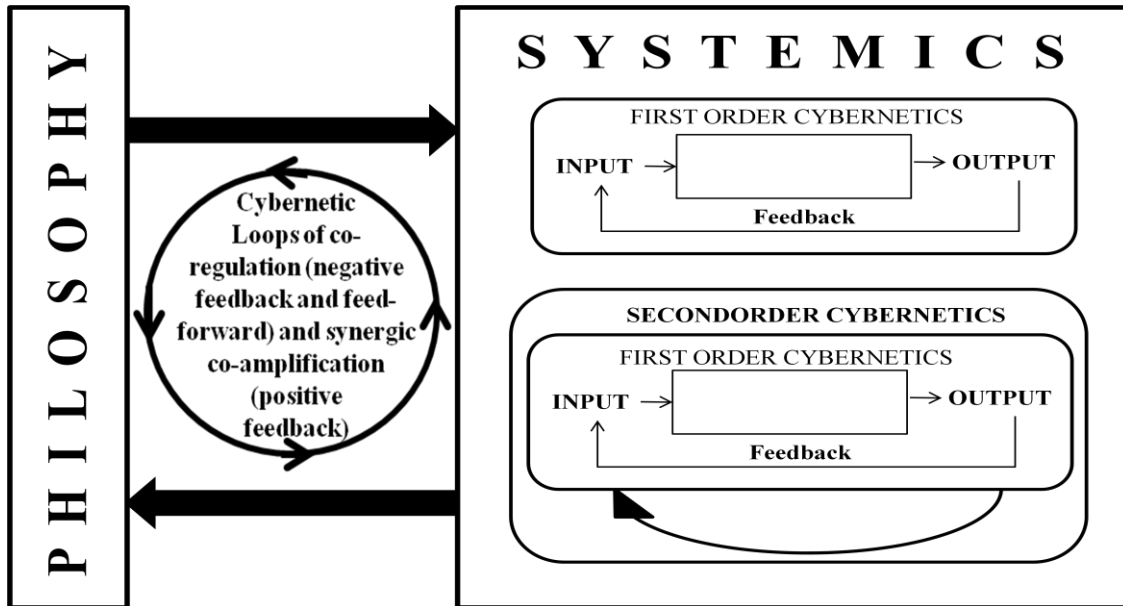
Figure 2: The same Figure 1 but making explicit that First and Second Order cybernetics are part of Systemic because they represent a specific, though very important, kind of relations based on feedback and self loops.

Figure 3: Topics of the special issue may be 1) in the intersection region (named *Cyberphilosophy*), 2) in any of the two linear ways of relating, and/or 3) in the non-linear, cybernetic relation shown with the two opposite arrows.

About the Journal of Systemics, Cybernetics, and Informatics (JSCI)

Editorial Board of the Journal: Posted at http://www.iiisci.org/journal/sci/EditBoard.asp

JSCI has been publishing, since 2003 (bimonthly issues), the best 20%-35%, of the articles presented at the IIIS conferences which are selected by the audience as the best ones in the sessions where they were presented. This means that the published articles are having three different mandatory peer reviewing processes: our two-tier reviewing the methodology and the selection made by the conference audiences.

JSCI was asked by the Directory of Open Access Journals (DOAJ) to re-apply because DOAJ identified more rigorous criteria to list journals in its directory and to index them. After re-applying the Journal was accepted again with the following new benefits (we are doing a copy and paste from the email we received from them):

> *"Benefits of supplying DOAJ with metadata:*

- *Our statistics show more than **900 000** page views and **300 000** unique visitors a month to DOAJ from all over the world.*
- *Many aggregators, databases, libraries, publishers and search portals collect our free metadata and include it in their products. Examples are **Scopus, Serial Solutions and EBSCO.***
- *DOAJ is OAI compliant and once an article is in DOAJ, it is automatically harvestable*
- *DOAJ is OpenURL compliant and once an article is in DOAJ, it is automatically linkable.*
- *Over 95% of the DOAJ Publisher community said that DOAJ is important for increasing their journal's visibility.*
- ***DOAJ is often cited as a source of quality,** open access journals in research and scholarly publishing circles."*

We are supplying our Journal's meta-data to DOAJ; *which is frequently referenced as a white list for electronic open access journals. We will supply the meta-data of this special issue, as well.*

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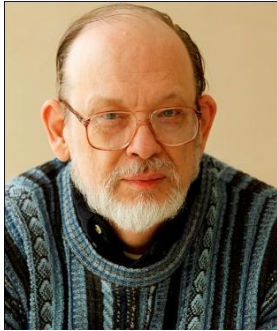
Professor Emeritus Thomas Marlowe, USA, Seton Hall University, Professor Emeritus, Department of Mathematics and Computer Science, PhD in Computer Science and PhD in Mathematics

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.

Co-Editors

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 graduated in Philosophy in the Unibersity of Florida and, 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 IIIS, 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/.

Fr. Dr. Joseph R. Laracy, **USA,** Seton Hall University, Department of Systematic Theology & Department of Mathematics and Computer Science

Father Laracy is a priest of the Roman Catholic Archdiocese of Newark and assistant professor at Seton Hall University. He earned a doctorate from the Pontifical Gregorian University in Rome. Within the field of systemics, Laracy is interested in systems theory (e.g., cybernetics), applied dynamical systems (e.g., modeling with differential equations), and systems engineering (e.g., safety & security engineering). Laracy's principal theological interests are in the intersection of faith & reason and theology & science. A significant part of his research and teaching is focused on placing the Catholic Intellectual Tradition, especially theology, in dialogue with the sciences: formal science (e.g., logic & mathematics), natural science (e.g., astrophysics & evolutionary biology), applied science/engineering (e.g., cybernetics), and medicine (e.g., psychiatry). Laracy's early career interests as a graduate student at the Complex Systems Research Laboratory at MIT concentrated on uncertainty and dynamics in large-scale, complex engineering systems. He looked at key sources of uncertainty, ways to model and quantify uncertainty, and ways to maintain properties such as safety and security as systems change over time. His work was supported by a NASA Ames Research Center Grant (Model-Based Hazard Analysis Research) and an NSF Grant (A Socio-Technical Approach to Internet Security). As an undergraduate engineering student at the University of Illinois, he pursued research to develop a scalable RSA cryptographic co-processor supported by an NSF VIGRE Grant, worked on a software pattern-based fly-by-wire aircraft control system, and served as a teaching assistant for a course on the Physics of Nuclear Weapons, Warfare, and Arms Control. In the course of his studies, he held engineering positions with Lucent Technologies (Wireless Terminal Interoperability Laboratory), Ball Aerospace and Technologies (NASA Deep Impact Mission), and Light Source Energy Services.

Dr. John Laracy, USA, Seton Hall University

Dr. John Laracy teaches full time in the Department of Religious Studies. He has taught a variety of undergraduate courses at Seton Hall, including "Christian Ethics," "Medieval Christian Thought," "Modern Christian Thought," "Christian Belief and Thought," "Christianity and Culture in Dialogue," and "Journey of Transformation." He has also taught "The Trinity" at the graduate level for the School of Theology. His research focuses on contemporary systematic theology, especially the Trinity. In 2018, he received his PhD from the Pontifical John Paul II Institute for Studies on Marriage and Family at the Catholic University of America. He is currently working on a book manuscript based on his dissertation titled, "*Divine Love as Event: A Study in the Trinitarian Theology of Hans Urs von Balthasar*." He is also studying the extent to which Bernard Lonergan's philosophy and theology can be harmonized with the theology of Hans Urs von Balthasar.

Dr. Andrés Tremante, USA, Florida International University,, Department of Mechanics, Director of the "Center for Diversity and Student Success in Engineering and Computing" (CD-SSEC).

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.

Dr. Susu Nousala, China Shanghai, Tongji University, Professor with the College of Design and Innovation, former researcher in sustainable design at Aalto University (Finland) and Fellow at SIAL (Spatial Information Architecture Lab), RMIT Design and Social Context, School of Architecture and Design, RMIT University.

A Professor with Design and Innovation (D&I), Tongji University, Founder and Director of Creative Systemic Research Platform, developing systemic project based learning, programs, concepts and practice with international partners. Previously a ("Chitian Scholar") Professor with Wuhan University of Technology (part time, 2014/15 - 2018), and previously a Senior Research Fellow at Aalto University, Finland. At Aalto, lectured for the "creative sustainability program" (CS), was a course developer and project coordinator for Aalto LABs (a CS project). She has also been awarded an honorary Research Fellow at GAMUT, Faculty of Architecture, Building and Planning, University of Melbourne, Australia (current). Susu has been visiting professor at Chiang Mai University (Thailand) with the faculty of Management, business administration, and was as a co-founder and co-director of Kororoit Institute (KI) Melbourne, Australia (KI is interdisciplinary research of complex and chaotic systems). Susu has been a Research Fellow at RMIT Design and Social Context, managing/researching for National and International research projects. Previous work and training has included art and cultural material conservation practice for various major cultural institutions Australia, England, France,

Holland, USA and Singapore. To date she chaired and co-chaired at numerous international symposiums and conferences, is author and co-author for more than 60 refereed journal, conference papers and book chapters. She has received academic and international awards as an invited guest and keynote speaker. She has been successful in working with many multi-disciplinary teams (and securing funding for National/International projects) in many countries including, Australia, New Zealand, Singapore, Malaysia, Indonesia, Thailand, Laos, Vietnam, India, Hong Kong, Taiwan, China, Finland, Denmark, England, France, Germany, Italy, Spain, Switzerland, Central America (Mexico City and other regions) and North America.

Professor Gianfranco Minati, Italy, founder and president of the Italian Systems Society.

Dr. Gianfranco Minati, systems scientist graduated in Mathematics from the University of Milan. He has switched from a position as an executive in a large industrial-financial Italian group (1979-1984) where he collaborated with Professor Dimitris N. Chorafas http://www.weizmann.ac.il/WeizmannCompass/sections/people-behind-the-science/dimitris-n-chorafas to research. He is founder and president of the Italian Systems Society (http://www.airs.it), network of academicians and researchers. Doctoral lecturer (2000-2017) at the Polytechnic of Milan/Department 'Building Environment Sciences and Technology' http://webhosting.polimi.it/tpqa/Cur/gm.htm . He is author, co-author and editor of several academic publications. His current research interest focuses on 1) Modelling processes of emergence by using Meta-Structures; 2) the emerging of a post-Bertalanffy Systemics; 3) the Dynamic Usage of Models (DYSAM), Logical Openness; 4) and Architecture and Design as the design of social meta-structures to influence processes of emergence in social systems; 5) Prime numbers distribution in number theory; 6) Unconscious in Artificial Intelligence. In the US he was Consulting Faculty at the Saybrook University, San Francisco, (professor Arne Collen), adjunct faculty at the OHIO State University (OSU), (professor Larry Magliocca).

His Research areas are Logical Openness, Collective Behaviour, Emergence, Ergodicity, Dynamic Usage of Models, Multiple-Systems and Collective Beings, Meta-structures. He is author of 36 articles, 17 books, editor of 10 books, and 36 chapters in edited books, http://www.gianfrancominati.net

Professor José Vicente Carrasquero, USA, CEO at Poliskopy Consulting LLC, Political Consultnat.

José Vicente Carrasquero is a Mathematician with a Ph.D. in Political Science, from the University of Connecticut. He is full University Professor, Expert in Public Opinion Research, Statistical Analysis of political and social data. Public Policy evaluation. Political Communication. Governance Consultant. Big Data. Speaker. During his career, he has combined the use of his knowledge of political science with the statistical management of social and political data in order to support the processes of decision making, design, and evaluation of public policies. As an environment analyst, he has designed strategies to ensure the best governance practices that guarantee the balance between the demands of the population and the capacities of public administrators.

During his tenure as a professor at the Universidad Simón Bolívar, he held significant positions as Director of Admission and Control Studies, Director of Planning and Director of USB University Litoral Campus. Also, he was part of the commissions that developed and implemented curricula for the Doctorate in Political Science, Specialization in Public Opinion and Political Communication as well as in Production Engineering. As tenured professor of Simon Bolivar University he has trained numerous doctoral students, now employed in academia and handled a number of successful tenure cases as Director of USB University Litoral Campus. In 2001, he was candidate for Rector of the Universidad Simón Bolívar.

Dr. Michael Savoie, USA, University of North Texas, G. Brint Ryan College of Business, Clinical Professor, Dept of Marketing, Logistics, & Operations Management, Former Dean of the College of Technology and Computing at Utah Valley University, USA, CEO of HyperGrowth Solutions

Professor Michael Savoie, Ph.D. has been involved in highly-complex computing systems for over 30 years. He studied fuzzy logic systems in the mid-1980's, created advanced complex simulations and neuro-linguistics programming solutions in the 1990's, and has continued to evolve the application of intelligent computing solutions to business and engineering problems. He currently resides in the MLOM department at UNT as a Clinical Professor of Operations Management where his research focuses on wrapping the business case around new and emerging technologies. Specific areas of research include information technology, electronic commerce, quality, operations management, and continuous improvement. His current writings explore the role of information technology in organizational transformation and the integration of IS with business processes. Dr. Savoie has experience in the following industries: Information Technology, Telecom, Energy (traditional and alternative) Government, Non-Profit, Training, Engineering, Quality, Education, Online Learning, E-Commerce. Infrastructure, Utilities, and Gaming.