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Dr. Søren Brier, Cognitive Information Scientist (Denmark)

Dr. Brier currently works in the Department of Management for Politics and Philosophy at the Copenhagen Business School. His major focus is on the theory of science and cognition with special focus on information, cognition and communication including cross-disciplinary research programs such as cybernetics, semiotics, concepts of knowledge and their utility for understanding and designing knowledge organizing and propagation of science. His primary areas of research include:

- Theory of Science
- Cognitive Science
- Cross- and trans-disciplinary function and possible autonomy in relation to mono-disciplinary science
- Cybernetics
- Bio-semiotic cognition- and communication theory
- Information theory
- Cybersemiotics
- The popularizing of science

Currently he teaches courses in the Theory of Science in Economics and Business Administration as well as the Communication of Science in Economics, Organization Communication, Business Administration and Philosophy.

Dr. Brier received his Masters degree in Biology in 1979 from the University of Copenhagen in Denmark. He earned his first Ph.D. in Theory of Science in 1994 from the University of Roskilde in Denmark and his second Ph.D. in Management Philosophy from the Copenhagen Business School in 2006.

Dr. Elizabeth A. Buchanan, Associate Professor at the School of Information Studies, University of Wisconsin-Milwaukee (United States)

Dr. Buchanan (1999: Ph.D. Multidisciplinary Doctoral Program, Ethics and Information Transfer, and 1996: Master of Library and Information Science, both at the University of Wisconsin-Milwaukee; 1992: Bachelor of Arts, cum laude, English and Philosophy, Rutgers University) is Associate Professor at the School of Information Studies, UW-Milwaukee, since 2005; Adjunct Associate Professor at the Center for the Study of Bioethics, Medical College of Wisconsin, since 2006; and Director of the Center for Information Policy Research, School of Information Studies, UW-Milwaukee, since 1999.

She authored, among many other contributions in the field: "Internet Research Ethics: Past, Present, Future" (in Ess et al. (eds) The Handbook of Internet Studies. Oxford: Blackwell, 2009); co-authored with Ess, C. "Internet Research Ethics: The Field and its Critical Issues". (In Tavani & Himma (eds.) Handbook of Information and Computer Ethics, Boston: John Wiley & Sons, 2008); with Henderson, K. Cases in Library and Information Science Ethics (Jefferson: McFarland, 2008); "How do various notions of privacy influence decisions in qualitative internet research?" (In Markham & Baym (eds.) Internet Inquiry: Conversations about Methods, Thousand Oaks: Sage, 2008). "Internet Research Ethics Questions and Considerations" (in Marian Quigley (eds.) Encyclopedia of Information Ethics and Security, Hershey: Idea Group/Information Science Publishing, 2007).

Dr. Mark Burgin, Visiting Scholar, UCLA (United States)

Dr. Mark Burgin received his M.A. and Ph.D. in mathematics from Moscow State University and Doctor of Science in logic and philosophy from the National Academy of Sciences of Ukraine. He is currently a Visiting Scholar at UCLA, USA. Previously he was a Professor at the Institute of Education, Kiev; at International Solomon University, Kiev; at Kiev State University, Ukraine; and Director of the Assessment Laboratory, Research Center of Science, National Academy of Sciences of Ukraine. Dr. Burgin is a member of New York Academy of Sciences and an Honorary Professor of the Aerospace Academy of Ukraine. He is a Chief Editor of the journal *Integration* and Associate Editor of the *International Journal on Computers and their Applications*. Dr. Burgin is doing research, has publications, and taught courses in mathematics, computer science, information sciences, artificial intelligence, logic, psychology, education, social sciences, and methodology of science. Dr. Burgin has authorized and co-authorized more than 500 papers and 17 books.

Dr. Jerry LR Chandler, Biochemist (United States)

Dr. Chandler, a biochemist, studies the foundations of the natural sciences from the perspective of theories of associative reasoning and logic. Associative logics are used to construct comparable methods of computation in chemistry, biology and medicine. He serves as President of the Washington Evolutionary Systems Society and as a Research Professor on the faculty of the Krasnow Institute for Advanced Studies at George Mason University. He is a member of the Board of Directors of the Foundation for Information Sciences. His works have contributed to theories of genetics, pharmacology and the systems sciences. Currently he is constructing the perplex number system for calculations of transactional processes of chemistry and molecular biology.

Dr. John Collier, Associate Professor of Philosophy and Information Theorist, University of Natal, (South Africa)

Dr. Collier first studied Earth and Planetary Science, focusing on planetary interiors, receiving a bachelors degree in 1971 from the Massachusetts Institute of Technology. He subsequently pursued psychology and philosophy at the University of California at Los Angeles where he received a Masters degree in Analytic Philosophy. His interest in Philosophy was in the relation between objective and subjective aspects of science. This remains his deepest focus to the present day. He received a Ph.D. in Philosophy of Science from the University of Western Ontario in 1984. His dissertation was Revolutionary Progress in Science: The Problem of Semantic Comparability.

Dr. Collier's first full time teaching was at the University of British Columbia (1991-92). His colleagues included biologists working with D.R. Brooks, who had recent proposed with E.O. Wiley a novel approach to biology based in information theory and non-equilibrium dynamics, now called the Unified Theory of Biology. His involvement with this group led to him giving them tutorials on information theory, which soon became his major focus of research.

He spent the next two years at the University of Calgary, where he finished his dissertation, and returned for a further two years as a University Research Fellow. He then went to Rice University, followed by a year at Indiana University. He then received a Canada Research Fellowship, and returned to the University of Calgary. He then moved on to the University of Melbourne in 1991. He then joined Cliff Hooker's Complexly Organised Adaptive Systems Group at the University of Newcastle in 1995, where he stayed until 2001 and pursued his interests in the foundations of information theory, dynamical systems and biological theory. He spent most of 2002 at the Konrad Lorenz Institute for Evolution and Cognition Research in Altenberg, Austria, where he did research into autonomy in dynamical systems. Since January 2003, he has taught at the University of Natal, in Durban, South Africa.

Dr. Mary Jo Deering, Director for Policy, National Cancer Institute Center for Biomedical Informatics and Information Technology (United States).

Mary Jo Deering, Ph.D, is Director for Policy in the National Cancer Institute's Center for Biomedical Informatics and Information Technology (CBIIT), in the U.S. Department of Health and Human Services (HHS), National Institutes of Health. Dr. Deering advises the Director, CBIIT; the HHS National Coordinator for Health Information Technology; and to other senior-level officials in regard to health information technology policy issues. She serves as a recognized authority on HIT policy matters at interagency, national, and international meetings and conferences; and oversees in-depth research, analysis and consensus on best practices related to policy regarding caBIG and the NHIN. Dr. Deering is also the NIH Liaison to the Federal advisory committee that prepares recommendations on health informatics policy for the HHS Secretary.

Prior to joining CBIIT, Dr. Deering was Deputy Director for eHealth and Management in the Office of Disease Prevention and Health Promotion (ODPHP) in HHS. She created the Science Panel on Interactive Communication and Health, which produced *Wired for health and well-being: the emergence of interactive health communication* (HHS 1999), and oversaw the follow up work on the quality and effectiveness of consumer eHealth applications. She led the creation and management of www.healthfinder.gov, the Federal consumer health information gateway on the Internet that won the prestigious Hammer Award from Vice President Al Gore. She had co-lead responsibility in ODPHP for overseeing the development of Healthy People 2010, the third decade-long national prevention initiative. She played a lead role in developing the functional standards for electronic health records as part of the HL7 standards development organization. Dr. Deering served on the U.S. Federal Communication Commission's Advisory Committee on Telecommunications and Health Care.

Dr. Deering has numerous publications and speaks on health information technology both nationally and internationally. She holds a Ph.D. from the University of Geneva, Switzerland; an M.A. from the Institute for European Studies in Geneva; and a B.A. cum laude from Smith College. Her book *Denis de Rougemont: l'Européen* , won the 1994 Prix européen from the Jean Monnet Foundation.

Dr. José María Díaz Nafría, Associate Professor of Telecommunication Engineering and Philosopher, University of León (Spain)

Dr. Díaz Nafría (PhD in Telecomunication Engineering, Universidad Politécnica de Madrid; M.S. in Telecomunication Engineering, Universidad del País Vasco; B.A. in Philosophy) is Associate Professor of Information and Communication Technologies at the University of León, previously at the University Alfonso X el Sabio in Madrid. He is co-founder and co-director of the research group BITrum for an Interdisciplinary Elucidation of the Information Concept. He is also member of the Unified Theory of Information Research Group (UIT) of Austria, and the International Center for Information Ethics (ICIE). He was research fellow at the Universidad del País Vasco; at the Vienna University of Technology and at the Technical University of Madrid. He has been visiting lecturer at the University of Furtwangen, University of Applied Sciences of St.Pölten and University of Salzburg.

Dr. J.M. Díaz Nafría co-edits with F. Salto and M. Pérez-Montoro the forthcoming *Glossary of concepts, metaphors, theories and problems concerning information* (Universidad de León, 2010), where he has authored several articles. He has also co-edited with F. Salto the special issue of the journal *TripleC* "What is really information? An interdisciplinary approach", 2009; as well as *What is information?* (Universidad de León, 2008). He authored "Are «the semantic aspects» actually «irrelevant to the engineering problem»?" (in *What is information?*, Universidad de León, 2008); "Indeterminacy of observation" (ibídem); "Tecnologías del ostracismo o la pseudocomunicación" (in *Le Monde Diplomatique en español*, 2007); *Contributions to the electromagnetic inverse problem* (in Spanish, Universidad Politécnica de Madrid, 2003). He belongs to the editorial board of Journal *TripleC, Cognition-Communication-Cooperation*.

He co-organized the *First Internacional Meeting of Experts in Information Theory – An interdisciplinary approach*, held in León, November 2008 (see <http://www.unileon.es/congresos/bitrum>) and the *Colloquium BITae*, held in León, November-December 2009.

His research interests lie in the Foundations of the information concept, the observation problem (both in the electromagnetic field and in general), and in models of technological development (telecommunication; culture, society and man).

Dr. Gordana Dodig-Crnkovic, Information Theorist and Physicist (Sweden)

Dr. Dodig-Crnkovic has worked in the Department of Computer Science and Electronics at Malardalen University since 2000. Prior to her work at the university she worked as a Critical Safety Analyst for the ABB Atom Company in the Nuclear Fuel Division for 10 years. She was in charge of criticality safety analyses aimed to assure that systems containing uranium do not start uncontrolled spontaneous nuclear chain reaction. The focus was on developing criticality safety methodology, contacts with authorities and writing conference papers. In the last years at ABB her work was directed toward writing the Criticality Safety Handbook.

Dr. Dodig-Crnkovic's research fellowships have included the Research Institute for Physics, AFI in Stockholm where she joined a theoretical nuclear physics group working on the alpha-clustering and alpha-decay problems. In 1984 she joined a nuclear physics group at Niels Bohr Institute in Copenhagen where her alpha-decay work continued. Then from 1985 to 1988 she worked on her Ph.D. thesis at Manne Siegbahn Institute in Stockholm. Her current research interests include the Philosophy of Computing and Information, Theory of Science, Methodology of Science and Professional and Research Ethics.

Currently, Dr. Dodig-Crnkovic holds two PhD's in Computing and Philosophy and Theoretical Physics. Her first is from the University of Zagreb in 1988 and her second is from Malardalen University in 2006. She utilizes her background in her current grant funded work with the Foundation for Knowledge and Competence Development.

Dail DeWitt Doucette, Information Scientist (United States)

Dail Doucette is a scientist and systems designer. He retired from the U.S. Air Force. His major subject of work has been interoperability, intercommunication interconnection, of Information Science and Technology issues between different academic and research disciplines, the different federal government departments, and other cultures and nations.

In addition to early experiences as an assistant city manager in two California cities, he has been an instructor in advanced information theories and display systems for the Engineering School at the University of California at Los Angeles, the American University Center for Technology (Washington, D.C.), and the NATO Science division (Brussels, Belgium). He was guest lecturer on the information aspects of cultural anthropology at the University of Kyoto (Japan), the American University in Beirut, the University of Southern California (USC), Cambridge University (United Kingdom), and the Fulbright Scholarship recipients orientation program for west coast U.S. universities. He assisted in formation of a joint Masters and Ph.D. program between USC and the University of Teheran (Iran). He was also Executive Vice President of ComFac, a commercial telecommunications corporation. He is a long-time active member of the American Association for the Advancement of Science, "Section T" (information, computing, and communications). He was an NGO delegate to the UNESCO World Summit on the Information Society in Geneva, Switzerland in 2003, and the second session in Tunis, Tunisia, in 2005.

He was a member of the original team that established the Air Force Data Design Center and the directorate of information technology for the Assistant Chief of Staff Operations, HQ, USAF. He was a member of the committee that founded the Society of Information Display, helped start the World Future Association, and is assisting in establishing the Foundation for Information Science as a professional society, as well as founding the Science of Information Institute.

Dr. Luciano Floridi, Professor of Information Philosophy, University of Hertfordshire & University of Oxford (United Kingdom)

Dr. Floridi (Laurea, Rome University "La Sapienza", M.Phil. and Ph.D. Warwick, M.A. Oxford) is Prof. of Philosophy at the University of Hertfordshire, where he holds the Research Chair in Philosophy of Information, and Fellow of St Cross College, University of Oxford. He is the founder and director of the IEG, Oxford University Information Ethics research Group, and of the GPI, the University of Hertfordshire research Group in Philosophy of Information. In 2006, he was elected President of IACAP (International Association for Computing And Philosophy). He is the first philosopher to have been elected *Gauss Professor* by the Göttingen Academy of Sciences. In 2009, the American Philosophical Association awarded him the *Barwise Prize*, in recognition of his research on the philosophy of information. Floridi is best known as the founder of two major areas of research: *Information Ethics* and the *Philosophy of Information*. His research interests include the Philosophy of Information, Information and Computer Ethics, Epistemology and Philosophy of Logic and the History and Philosophy of Scepticism.

Dr. Floridi has published over a hundred articles in these areas in many anthologies and in such peer-reviewed journals as *Archiv für Geschichte der Philosophie*, *British Journal for the History of Philosophy*, *Erkenntnis*, *Ethics and Information Technology*, *International Journal of Human-Computer Studies*, *Journal of the History of Ideas*, *Metaphilosophy*, *Minds and Machines*, *Philosophy* and *Phenomenological Research*, *Social Epistemology*, *Synthese*, *The Information Society* and *Zeitschrift für Allgemeine Wissenschaftstheorie*. He is the author of *Scepticism and the Foundation of Epistemology - A Study in the Metalogical Fallacies* (Leiden: Brill, 1996); *Internet - An Epistemological Essay* (Milan: Il Saggiatore, 1997); *Philosophy and Computing: An Introduction* (London - New York: Routledge, 1999); *Sextus Empiricus, The Recovery and Transmission of Pyrrhonism* (Oxford: Oxford University Press, 2002). He is editor of the *Blackwell Guide to the Philosophy of Computing and Information* (Oxford - New York: Blackwell, 2004). He is currently editing the *Handbook of Information and Computer Ethics* for Cambridge University Press and working on two new books for Oxford University Press: *The Philosophy of Information*, and *Information* for the Very Short Introduction series. His works have been translated into Chinese, French, Greek, Japanese, Hungarian, Persian, Polish and Portuguese and Spanish.

Ted Goranson, Information Theorist (United States)

Ted Goranson graduated from MIT in 1971 with three degrees simultaneously, reflecting an interdisciplinary research agenda: computer science, collaborative design, and complex visualization/abstraction. Upon graduation from MIT he founded Sirius-Beta, a research firm focused on infrastructure, and has functioned since then as its chairman and chief scientist.

He has been an advisor to the CIA, ARPA, Air Force Manufacturing Technology Directorate, National Research Council, and IBM. Noted activities, either through Sirius-Beta or independently (when required), include:

- Visions Architect for the Space Station Information System (until project termination).
- Supported an effort called Automation of Technical Information (ATI), which became the Computer Aided Logistics Support (CALS) program.
- Technical monitor for DARPA Initiative in Concurrent Engineering (DICE).
- Lead technical input for the Defense Manufacturing Board on Concurrent Engineering (CE).
- DARPA's onsite technical lead for information infrastructure issues at SEMATECH (Semiconductor Manufacturing Technology Consortium).
- Led the SEMATECH/MCC Suppliers' Working Group, formed of IBM/DEC/ATT/HP, to develop pre-competitive technologies for the commercial/defense manufacturing base.
- Lead as the US action officer for NSF/ESPRIT (European Strategic Programme for Research in Information Technology).
- Advised IBM on the reinvention of the IBM/Dassault CATIA framework.
- Internal advisor to Air Force Manufacturing Technology (ManTech) program.
- Principle Investigator for new modeling and metrics technologies for the Agile Virtual Enterprise - work sponsored by DARPA and NSF.

Goranson is/was a founding board member of the International Society for the Interdisciplinary Study of Symmetry—other founding members include Nobel laureates and the former ministers of science of Japan, Israel and the Soviet Union; the Business Applications of Situation Theory series of workshops; and the original International Conference on Enterprise Integration Modeling Technology (ICEIMT) workshops.

He is a key contributor to the Foundations of Information Science (FIS) series of workshops; the NIST-sponsored revival of ICEIMT; the NRC study on Visionary Manufacturing Challenges: 2020; and the Integrated Manufacturing Technology Roadmap projects co-sponsored by the Departments of Defense, Energy, Commerce and the National Science Foundation.

Dr. Wolfgang Hofkirchner, Professor of Internet Society, University of Salzburg (Austria)

Dr. Hofkirchner studied political science and psychology at the University of Salzburg where he was awarded his doctorate of philosophy on the thesis "The Controversy between Karl Raimund Popper's Critical Rationalism and Marxism. The concept of scientific law in the contemporary dispute."

From 1980 to 1990 he was a research fellow at the Institute of Socio-Economic Development Research of the Austrian Academy of Sciences working in the field of: Science – Technology – Society, in particular, assessment of automatisation technologies, philosophy of science, peace research, political economy and ecology.

From 1991 to 2001, Dr. Hofkirchner was an assistant professor at the Institute of Design and Technology Assessment in the Vienna University of Technology where he taught Informatics & Society and Media Informatics and worked in the field of: Science – Technology – Society, in particular, informatisation (theories of information society, "Unified Theory of Information", Evolutionary Systems Theory, and Design Theory). From 1999 to 2001 he served as deputy head. He undertook his postdoctoral lecture qualification with a thesis in the field of Technology Assessment on the topic of “Project One World – An essay on the self-organization of Information Society. Or Cognition Communication Co-operation.” Since 2001 he has been an Associate Professor at the Vienna University of Technology. In 2004 he was awarded the professorship for Internet & Society at the Center for Advanced Studies and Research in Information and Communication Technologies and Society at the University of Salzburg. His current teaching focus is Information Society Theory and Foundations of Information Science.

Dr. Hofkirchner has published more that 100 contributions including 15 books (author or co-author of 7 books, editor or co-editor of 8 books).
He is currently serving as the head of the Science of Information Institute's Scientific Advisory Board.

Alicia Juarrero, Professor (United States and Cuba)

Born in Cuba, Alicia Juarrero received her BA, MA and Ph.D. in Philosophy from the University of Miami (Florida). She has taught at Prince George's (MD) Community College since 1975, and was the first community college professor to receive a Presidential appointment to the National Council on the Humanities, the governing board of the National Endowment for the Humanities. She served as Chair of the NEH's Committee on Federal/State Partnership, which oversaw the $32 million that the NEH distributes annually among the 56 State Humanities Councils. Dr. Juarrero has conducted three major faculty seminars sponsored by the National Endowment for the Humanities (NEH), and taught the philosophy module in the NEH-supported Clemente Course, a program that uses a college-level humanities course to bring the poor out of poverty and into the full life of their communities. Dr. Juarerro was named the 2002 Outstanding Community College Professor of the Year.

Dr. Juarrero lectures widely, both in the U.S. and Europe, and her many articles on action theory have appeared in prestigious professional journals, including The Review of Metaphysics and The Texas Law Review. Her book Dynamics in Action: Intentional Behavior as a Complex System was published by The MIT Press in 1999 and reprinted in 2002. Her most recent publication is Reframing Complexity: Perspectives from the North and South for which she served as co-editor (ISCE Publishing, Massachusetts, 2007). She lives in Washington, D.C.

Leah A. Lievrouw, Professor (United States)

Leah A. Lievrouw is a Professor in the Department of Information Studies, in the Graduate School of Education and Information Studies at the University of California, Los Angeles, and is the 2006-07 Sudikoff Fellow for Education and New Media. Her research and writing focus on the social and cultural changes associated with media and information technologies, and on the relationship between new technologies and knowledge.

With Sonia Livingstone (of the London School of Economics and Political Science), Dr. Lievrouw is co-editor of The Handbook of New Media (Updated Student Edition; Sage Publications, London, 2006), and of the forthcoming collection, Major Works in Communication: New Media (Sage London; in preparation).

Lievrouw is also the author of Understanding Alternative and Activist New Media (Polity Press, Cambridge; in preparation). Her other books include Competing Visions, Complex Realities: Social Aspects of the Information Society (co-edited with Jorge Reina Schement, Ablex, 1987), and Mediation, Information and Communication: Information and Behavior, vol. 3 (co-edited with Brent Ruben, Transaction, 1990). From 2001-2005 she was co-editor of the journal New Media & Society.

Dr. Lievrouw received a Ph.D. in communication theory and research in 1986 from the Annenberg School for Communication at the University of Southern California. She also holds an M.A. in biomedical communications / instructional development from the University of Texas Southwestern Medical Center in Dallas, and a Bachelor of Journalism from the University of Texas at Austin.

She was formerly a member of the faculties of the Department of Telecommunication and Film at the University of Alabama in Tuscaloosa, and of the Department of Communication at Rutgers University in New Brunswick, NJ. In 2005 she was a visiting scholar at the University of Amsterdam's School of Communication Research (ASCoR) in The Netherlands.

Dr. Robert K. Logan, Physicist and Media Ecologist, University of Illinois and University of Toronto (Canada)

Dr. Robert Logan received a BS and PhD from MIT in 1961 and 1965. After two post-doctoral appointments at University of Illinois (1965-7) and University of Toronto (1967-8) he became a physics professor in 1968 at the University of Toronto until his retirement in 2005.

During this period in addition to math-based physics courses he taught an interdisciplinary course The Poetry of Physics which led to his collaboration with Marshall McLuhan and his research in media ecology and the evolution of language. His best known works are *The Alphabet Effect* based on a paper co-authored with McLuhan, *The Sixth Language* and *The Extended Mind.*

The Alphabet Effect develops the hypothesis that the alphabet, codified law, monotheism, abstract science and deductive logic form an autocatalytic set of ideas that developed uniquely between 2000 BC and 500 BC between the Tigris-Euphrates River system and the Aegean Sea. *The Sixth Language* develops the hypothesis that speech, writing, math, science, computing and the Internet form an evolutionary chain of languages. It won the Suzanne K. Langer Award for Outstanding Scholarship in the Ecology of Symbolic Form in 2000 from the Media Ecology Association. He has also developed The Extended Mind Model for the origin of language described in a book published in 2007 by the University of Toronto Press entitled *The Extended Mind: The Emergence of Language, the Human Mind and Culture*. Forthcoming, *Understanding New Media: Extending Marshall McLuhan* will be published by Hampton Press; in preparation, and inquiry in the nature of information will be compiled in *What is information?.*

In October of 2006, Prof. Logan converged with a group of researchers from the Ontario College of Art & Design to create a strategy to change general attitudes towards the environment. The strategy was language based and the group coined the term "depletist." The word is meant as a label/tool for combating environmental negligence.

Dr. Pedro Marijuán, Information Theorist (Spain)

Dr. Marijuán earned a degree as an Industrial Engineer in the field of "Enterprise Organization" from the Universidad Politécnica de Cataluña (1975); and a Doctor of Cognitive Neuroscience, with a PhD Thesis on "Natural Intelligence", from the Universidad de Barcelona (1989). He has held positions as Research Collaborator at the Universidad de Barcelona (1987-88); Visiting Research Associate at the University of Canberra (1989-90); Visiting Research Associate at the University of Chicago (1990-92); and Research Professor at the Universidad de Zaragoza (1993-2004). He has served as Director Cátedra SAMCA, CPS-I3A, Universidad de Zaragoza from 2005 to the present.

Dr. Marijuán's scholarly activities have included general research on the nature of intelligence and the nature of information, both at the molecular-cellular and organismic (brain) levels; co-founder with Michael Conrad of FIS (Foundations of Information Science); organizer and co-organizer of several international conferences in the FIS field (Madrid 1994, Vienna 1996, Paris 2005); organizer of the International Cajal Conference (Zaragoza, 1999); organizer of the regular series of conferences "Ateneo del CPS"; organizer of several "Encuentros de Neurociencias (2005-07) and "Foros Tecnológicos y Empresariales".

Selected publications include: The Dual Brain (book in Spanish: "El cerebro dual"), Editorial Hacer, Barcelona (1997). Editor of two special issues on FIS: Foundations of Information Science, Journal BioSystems (1996, 1998). Editor FIS special issue Journal Symmetry: Culture and Science (1997). Editor of special issue on Information Science at Cybernetics and Human Knowledge (1998). Editor of special issue Cajal and Consciousness at the Annals of the New York Academy of Sciences (2001).

Dr. Marijuán's current fields of interest are information science, symmetry, bioinformation, cognitive neuroscience, epistemology, philosophy of science.

Dr. Koichiro Matsuno, Professor Emeritus of biophysics in the Nagaoka University of Technology (Japan)

Dr. Matsuno is currently Professor Emeritus of biophysics in the Nagaoka University of Technology in Japan. He obtained his Ph.D. in physics from the Massachusetts Institute of Technology in 1971. Dr. Matsuno's research interest includes chemical evolution, cell motility and evolutionary processes. He is the author of Protobiology: Physical Basis of Biology (CRC Press, Boca Raton FL, 1989) and What is Internal Measurement (Seido-sha, Tokyo, 2000)、and the co-author of *Molecular Evolution and Protobiology* with K. Dose, K. Harada, and D. L. Rohlfing (Plenum Press, New York, 1984), The Origin and Evolution of the Cell with H. Hartman (World Scientific, Singapore, 1992), and Uroboros: Biology Between Mythology and Philosophy with W. Lugowiski (Arboretum, Wroclaw Poland, 1998). He is also editor of journal BioSystems.

Dr. John Mingers, Director of Research, Kent Business School, University of Kent (United Kingdom)

John Mingers is Professor of Operational Research and Information Systems at Kent Business School, University of Kent, and is Director of Research. Prior to that he was Head of the OR and Systems group at Warwick Business School. John Mingers studied Management Sciences for his first degree at Warwick University and later completed an MA in Systems in Management at Lancaster University and a PhD at Warwick.

His research interests include the use of systems methodologies in problem situations - particularly the mixing of different methodologies within an intervention (multimethodology); the application of multimethodology to research methods within information systems; critical realism in information systems (IS) and operational research(OR), the development of the critical systems approach; autopoiesis (self-producing systems) and its applications; and the nature of knowledge, information and meaning as relevant to information systems. He has published over 100 papers in these areas in journals such as the Journal of the Operational Research Society, Information Systems Research, ICIS, European Journal of OR, The Sociological Review, Systems Practice, Systems Research, Management Learning and Organization. He published the first comprehensive study of autopoiesis - Self-Producing Systems: Implications and Applications of Autopoiesis (Wiley), and his recent book, "Realising Systems thinking: Knowledge and Action in Management Science" (Springer) includes chapters on the nature of information and its relations to meaning and knowledge.

Dr. Francisco Salto Alemany, Professor of Logic and Philosophy of Science, University of León (Spain)

Dr. Salto Alemany (Graduate in Philosophy and PhD, Universidad de Salamanca, Spain) is Professor of Logic at the Universidad de León (Spain) since 2002, Lecturer at the Institute for Logic, Cognition, Language and Information (University of Basque Country), co-founder and co-director of the research group BITrum for an Interdisciplinary Elucidation of the Information Concept; Fellow and co-founder of the *Research Group in Philosophical Logic* at the Universidad de Salamanca; Member of the *Humanities Group* of the Universidad de León and the *Unified Theory of Information Research Group* (Austria) and is member of the Editorial Board of the Journal *TripleC, Cognition-Communication-Cooperation*. He was Assistant Professor at the Universidad de Salamanca, Visiting Fellow at Princeton University and Scholar at the Ruhruniversität Bochum.

His research work in mathematical logic embraces: Logic without Contradiction, Positive Non Classical Negation, Axiomatization, Identity, Games and Game Semantics, which has been publicized in Bulletin of the Section of Logic; Journal of Philosophical Logic; Journal of Symbolic Logic; Logical Studies; Logique et Analyse; Notre Dame Journal of Formal Logic; Reports on Mathematical Logic; Studia Logica; Theoria (e.g., co-authored with Méndez and Robles "The basic constructive logic for negation-consistency defined with a propositional falsity constant", Bulletin of the Section of Logic 36 (2007); "Relevance logics, paradoxes of consistency and the K rule", Logique et Analyse 50 (2007). In the field of games and game semantics has developed the software system Ithaca. He has also authored several works in philosophy, edited in Theoria, Analecta Husserleana, Phil. Zeitschrift, etc.

Dr. F. Salto co-edits with J.M. Díaz and M. Pérez-Montoro the forthcoming *Glossary of concepts, metaphors, theories and problems concerning information* (Universidad de León, 2010), where he has authored several articles. He has also co-edited with J.M. Díaz the special issue of the journal *TripleC* "What is really information? An interdisciplinary approach", 2009; as well as *What is information?* (Universidad de León, 2008).

Dr. Edwina Taborsky, Professor of Sociology and Anthropology, Bishop's University (Canada)

Dr. Taborsky is a professor, author and scientist best known for her work in semiotics and information processing. She has been awarded 14 grants in the last 20 years, taught at five universities, sat on four board of directors for various arts organizations as well as organized two international conferences for SEE Research Institute. She has written five books and is currently completing her sixth, and has over 40 articles published since 1975.

Dr. Taborsky has worked for many years in semiotics, understanding it as the basic operating mode of all abiotic and biotic reality, and defining semiosis as the transformation of matter to information within all realms - the physicochemical and biological as well as the social realm. Her books and articles have explored this multifaceted structure as a dynamic evolving complex adaptive network.

She has authored three books and more than thirty papers as well as numerous conference papers exploring these issues; organized two international conferences; and reviewed numerous papers, working within a broad interdisciplinary focus. Her interests include the complex network of our reality, a reality made up of physical and chemical as well as biological processes, cognitive science, biosemiotics, and the philosophy and pragmatism of Charles S. Peirce.

Recent work has developed a view that reality operates as a function, explained in the formula of f(x)=y, which means that x (data, input) is transformed via normative rules (f) to y (output, information). This function uses spatial, temporal and modal measurements within six relations - and this seemingly simple format generates all of reality.

Dr. Taborsky is the editor of the online journal SEED, which publishes articles within these perspectives in diverse disciplines, including physics, mathematics, biology, computer science and the social sciences.

Dr. Rainer Zimmermann, Physicist and Philosopher (Germany)

Dr. Zimmermann's academic credentials include 1971-1975 studies in Physics and Mathematics (University of Technology and Free University Berlin, as DAAD –German Academic Exchange Service– scholar at Imperial College London); 1974 Diploma of Imperial College (Mathematical Physics); 1975 (Main) Diploma in Theoretical Physics (FU Berlin); 1977 *PhD in Mathematics* (FU Berlin); 1982-1988 Studies in Philosophy, History, and Literature (TU Berlin); and 1988 *PhD in Philosophy* (TU Berlin). He has held the following positions: since 1995 *Professor* of Philosophy at the Polytechnic University of Muenchen;1998 *Habilitation* in Natural Philosophy (University of Kassel) – since then member (Privatdozent) of the department there; 1999/2000 Visiting Scholar at the History and Philosophy of Science Department and Visiting Fellow of Clare Hall, both at Cambridge (UK) – since then Life Member of Clare Hall; 2001 Research Visitor to the University of Bologna, Cooperative Research Project there under the title "Reconstruction of the Historical City Centre"; 2003 Senior Visiting Fellow to the Institute of Advanced Studies, Villa Gandolfi Pallavicini, University of Bologna; 2006 International Visiting Professor at the Information and Communication Technologies and Society program, University of Salzburg.

Dr. Zimmermann has served as a Member of the Science Advisory Committee of the Ernst Bloch Centre, Ludwigshafen; leader of the project group "The Problem of Nature after German Idealism" with the Interdisciplinary Study Group on Foundational Problems of Philosophy at the University of Kassel, 2001-2005; also INTAS cooperative member (team leader) together with groups of the University of Technology Vienna, the University of Kiev, and the Russian Academy of Science, Moscow, on the topic "Human Strategies in Complexity"; from 2002 on Corresponding Member of the Académie Européenne des Sciences, des Arts et des Lettres, Paris. From 2005 onward, Dr. Zimmermann has had bilateral cooperation with the Information and Communication Technologies and Society program, University of Salzburg.

Dr. Zimmermann's research interests are in Metaphysics and Philosophy of Nature (on the line Spinoza – Schelling – Bloch) including Philosophy of Science and Ethical Implications, Relationship between ontological and epistemological consequences of the perceiving and the modeling of the world.