



# CONFERENCE

# Quantum Decision Theory and Complexity Modelling in Economics and Public Policy

BIO OF SPEAKERS

Date: 19 – 20 February, 2020

**Venue: T-2 Global Conference Room** 

O.P. Jindal Global University, Sonipat - 131001, Haryana (NCR of Delhi)



#### **Alexander Milanov**

Aleksandar Milanov is a legal researcher in the fields of International Law and Legal Philosophy with a particular focus on International Space Law, Human Rights Law, International Trade Law, and on the subject of establishing of humankind as a separate legal subject. Before joining JGU, he was a legal researcher in Institute for Legal Studies of Bulgarian Academy of Sciences and Foundation NAC. He had won an "Ernst Mach" scholarship for conducting a specialization in International Space Law in

Vienna University. He had published numerous articles, scientific legal reports and two books. He is a proponent of the holistic approach in legal regulation and author of the book "Holistic Society". He has a LLM degree from Sofia University.



#### **Amit Lahiri**

Amit is the Chief Sustainability Officer at O.P. Jindal Global University in India, and an Associate Professor at the IIHEd-a preeminent research institute at the university. He is the founding Executive Director of CECRAS. He combines about ten years of experience in the global life sciences industry in two MNCs with about twenty years in the higher education sector. His career has spanned working across Canada, France, Germany, the U.A.E. and India. He has a Master's degree in Environmental

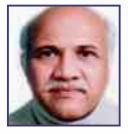
Studies (Sustainable Development) from York University, Canada, a Graduate Diploma in Business & the Environment (Sustainability) from the globally ranked Schulich School of Business, Canada and a Master's degree in the Life Sciences (Molecular Biology) from Bombay University, India. He has been awarded the Board of Governors Award of Excellence in 2015, the highest award in the Ontario Colleges of Applied Arts & Technology in Canada. He was a featured speaker the same year in the CSR (Corporate Social Responsibility) panel 'Tech for Good' at the prestigious NASSCOM's National India Leadership Forum (NILF). He was invited to speak at the plenary panel at the eminent Tata Institute of Social Sciences-the National CSR Conclave in November 2017 on 'Driving SDGs through CSR in India'. He was a featured speaker amongst industry experts at the Mahindra & Mahindra Sustainability Forum in 2018 on 'Environmental & Social Governance'. In 2019, he was invited by the MCA (Ministry of Corporate Affairs) to present a model to map SDGs (Sustainable Development Goals) to the CSR spending in India as a way to measure the overall developmental impact.



# **Anirban Chakraborty**

Anirban Chakraborti is a professor at the Jawaharlal Nehru University, New Delhi. He had been a faculty at École Centrale Paris, France, and Banaras Hindu University, India. He had obtained a Ph.D. in Physics from Saha Institute of Nuclear Physics, India and then the Habilitation in Physics from the Université Pierre et Marie Curie (Paris VI), France. He has the experience of working as a scientist in many reputed universities and educational institutions in India, USA, Europe, and Japan. He was

awarded the prestigious Young Scientist Medal of the Indian National Science Academy in 2009 for pioneering work in Econophysics. He has published thirteen books and edited volumes, and more than eighty-five research and review articles in internationally renowned publishing houses. His main research interests lie in the areas of Econophysics, Sociophysics, Data Science, Complex Systems, Statistical Physics, Quantum Physics and Nanomaterial Science.



# **Birendra Mallick**

Birendra Nath Mallick (born 1 August 1956) is an Indian neurobiologist and a professor of neurobiology at the School of Life Sciences of Jawaharlal Nehru University. Known for his research on the Neuroscience of sleep, Mallick has authored and edited articles and texts on the subject, which included the first monograph on REM Sleep. He is a J. C. Bose National Fellow of the Department of Biotechnology and an elected fellow of all the three major Indian science academies viz. National

Academy of Sciences, India, Indian Academy of Sciences, and Indian National Science Academy. The Council of Scientific and Industrial Research, the apex agency of the Government of India for scientific research, awarded him the Shanti Swarup Bhatnagar Prize for Science and Technology, one of the highest Indian science awards for his contributions to Medical Sciences in 2001. Recently Professor Mallick is also interested in investigating links between neuroscience and human behavior in decision theory perspective. His another deep focus is on human consciousness study.



#### **David John Orrell**

David John Orrell is a Canadian writer and mathematician. He received his doctorate in mathematics from the University of Oxford. His work in the prediction of complex systems such as the weather, genetics and the economy has been featured in New Scientist, the Financial Times, Adbusters, BBC Radio, Russia-1, and CBCTV. He now conducts research and writes in the areas of systems biology and economics, and runs a mathematical consultancy Systems Forecasting. He is the son of theatre

 $historian \ and \ English\ professor\ John\ Orrell.\ David\ Orrell's\ best-selling\ book\ 'Quantum\ Economics'\ is\ a\ ground\ breaking\ work\ in\ quantum\ like\ modelling\ in\ social\ science.$ 



# **David Rooney**

David Rooney is Professor of Management and Organisational Studies, Department of Marketing and Management, Faculty of Business and Economics, Macquarie University. Currently David is professor Emeritus of the same University. His research focuses on understanding the role of wisdom and knowledge in the economy, work, and leadership. He has published a number of books including Public Policy in Knowledge-Based Economies, the Handbook on the Knowledge Economy (Vols 1 & 2),

Knowledge Policy, and Wisdom and Management in the Knowledge Economy. Professor David is also working in the areas of quantum cognition modelling and its potential applications in the organisational decision making and wisdom theory.



## **Emmanuel Haven**

Emmanuel Haven has been a pioneer in the emerging paradigm of quantum like modelling in social science. He is the Dr. Alex Faseruk Chair in Financial Management at the Memorial University, Canada. He earned a bachelor of arts and master of arts in economics from McGill University and a PhD in finance from Concordia University. He's the former head of the finance division at the School of Business, University of Leicester (United Kingdom). His research applies concepts from physics to

social science. He has published in social science journals such as Journal of Mathematical Economics, Economic Theory, Journal of Mathematical Psychology, European Journal of Operational Research, Journal of Economic Dynamics and Control, International Review of Financial Analysis, Theory and Decision and Frontiers in Psychology. He also has published in science journals such as Philosophical Transactions of the Royal Society A, Foundations of Physics, Journal of Mathematical Analysis and Applications, Physica Scripta, International Journal of Theoretical Physics, Acta Applicandae Mathematicae, Progress in Biophysics and Molecular Biology, Annalen der Physik and other journals. Haven has been awarded several times a 'super star award' from the Students' Union (University of Leicester) for his teaching. Emmanuel is also the Director of the Interdisciplinary PhD programme at Memorial University.



# **Milindo Chakraborty**

Milindo Chakrabarti has distinguished experience of over 27 years as a Professor of Micro-economics, International Trade & Business, Environmental Economics, Indian Economics and Development Economics, nationally and internationally. Along with his long standing career in teaching, Chakrabarti holds Research Experience of 27 years and has written and published numerous research paper, articles and books from India and abroad. He has also delivered lectures at Indiana University,

Bloomington, University of Southern California, Los Angeles, Indian Institute of Management, Ahmedabad, Entrepreneurship Development Institute, Gandhi Nagar. Chakrabarti has extensive experience in policy development and practice, and wide knowledge and experience working in different sectors such as: natural resources, social sectors, rural development, key cross-cutting issues, environment, governance and institutional development. Chakrabarti regularly travels throughout India on various academic and research assignments, and has travelled across many countries on academic assignments, for instance Bangladesh, Nepal, Sri Lanka, Thailand, China, Kenya, USA, Canada, UK, France, Italy, Portugal Egypt and Turkey. He has also been consultant to different ministries of Govt. of India, the Planning Commission, the World Bank UNDP, IFAD, the British Council. In his list of professional affiliations, he has also been a Member of Western Economic Association International, USA, Executive Director in Development Evaluation Society of India (DESI) and also Member, Network of Network on Impact Evaluation (NONIE).



## **Gaganpreet Singh**

Gaganpreet Singh did his PhD in Marketing (Pricing) from NITIE, Mumbai. His research has featured in acknowledged marketing journals namely; Australasian Marketing Journal, Benchmarking: An International Journal, Journal of Fashion Marketing and Management, Journal of Revenue and Pricing Management, and International Journal of Revenue Management. He has extensively published case studies with Ivey Publishing and Emerald Emerging Markets Case Studies. He has co-authored a book on

primary case studies published by Pearson Education. Currently, He is also working in the areas of quantum like modelling in managerial decision making.



#### **Partha Ghose**

Partha Ghose is a legendary quantum physicist in India, perhaps the only living PhD student of the late genius SN Bose (Bose-Einstein statistics). He, (born 1939), FNASc, is an Indian physicist, author, philosopher, musician and former Professor at the S.N. Bose National Centre for Basic Sciences in Kolkata. Currently his research interest also focusses on Quantum Cognition modelling, and possible extension of such a novel framework in social science. He is best known in the physics world for his

significant contributions to theoretical physics, particularly the foundations of quantum mechanics. (i) His paper in collaboration with D. Home and G. S. Agarwal (the GHA experiment) in unravelling the nature of wave–particle duality in single-photon experiments led to its experimental verification by Y. Mizobuchi and Y. Ohtake in Japan and later by M. Genovese and collaborators in Italy. This work has been widely referred to and has found place even in popular texts., (ii) His work on Bohmian trajectories of photons formed the basis for a comparison of these trajectories from those that were later observed experimentally with weak measurements. (iii) He has also made a pioneering contribution by showing that 'entanglement' can occur in classical polarization optics resulting in violations of Bell-like inequalities hitherto believed to be exclusive to quantum systems. This has led to many investigations and experiments confirming such violations and consequently to a shifting of the boundary between quantum and classical physics. Ghose's exposition of Rabindranath Tagore's philosophy and music has found expression in several scholarly papers. He served as the Hon. Secretary of the Visva-Bharati Music Board for a few years. He also served as a member of the Working Group on National Language Policy, Knowledge Commission, Govt of India.



#### **Stuart Kauffmann**

Stuart Alan Kauffman (born September 28, 1939) is an American medical doctor, theoretical biologist, and complex systems researcher who studies the origin of life on Earth. He was a professor at the University of Chicago, University of Pennsylvania, and University of Calgary. He is currently emeritus professor of biochemistry at the University of Pennsylvania and affiliate faculty at the Institute for Systems Biology. He has a number of awards including a MacArthur Fellowship and a Wiener Medal.

He is best known for arguing that the complexity of biological systems and organisms might result as much from self-organization and far-from-equilibrium dynamics as from Darwinian natural selection as discussed in his book Origins of Order (1993). In 1967 and 1969 he used random Boolean networks to investigate generic self-organizing properties of gene regulatory networks, proposing that cell types are dynamical attractors in gene regulatory networks and that cell differentiation can be understood as transitions between attractors. Kauffman graduated from Dartmouth in 1960, was awarded the BA (Hons) by Oxford University (where he was a Marshall Scholar) in 1963, and completed a medical degree (M.D.) at the University of California, San Francisco in 1968. After completing his internship, he moved into developmental genetics of the fruitfly, holding appointments first at the University of Chicago from 1969 to 1973, the National Cancer Institute from 1973 to 1975, and then at the University of Pennsylvania from 1975 to 1994, where he rose to Professor of Biochemistry and Biophysics.

#### **CONFERENCE ORGANISERS**



# **Naresh Singh**

Naresh Singh has more than 3 decades of post Ph.D. international development experience in more than 50 countries. He was a Director General and acting Vice President at CIDA; Program Director at the at the International Institute for Sustainable Development (IISD); Principal Adviser on Poverty and Sustainable Livelihoods at UNDP and Executive Director of the UN Commission on Legal Empowerment of the Poor; among several other high-profile positions. He has also been visiting

scholar/professor as several Universities in North America, India and the Caribbean and is widely published.



#### R Sudarshan

Ramaswamy Sudarshan has had distinguished careers in the domains of research, development programming and governance. After he obtained a Master's degree in Economics from the Delhi School of Economics he was elected to a Rhodes scholarship. He joined Balliol College, University of Oxford, and obtained a Master's degree in Politics in 1977. He was elected to a research fellowship at St. John's College, University of Cambridge, where he studied judicial review of economic legislation by

the Supreme Court of India, specializing in the interface of law and economics. In 1983 he was a visiting scholar in the School of International Development, University of East Anglia. In 1984 he served in the Ford Foundation's South Asia Office in New Delhi as Assistant Representative and Program Officer for Human Rights and Social Justice. In 1991 he joined the UNDP in India as Senior Economist and Assistant Representative for Governance and Public Policy. In 2000 he served UNDP in Jakarta as its Senior Governance Advisor. In 2002 he was appointed Policy Advisor for Justice and Governance in the UNDP Oslo Governance Centre. In 2005, he was transferred to the UNDP Asia-Pacific Centre in Bangkok, where he was Regional Policy Advisor for Governance, Human Rights, Rule of Law, Justice, and Legal Reforms. In 2012 he joined the O.P. Jindal Global University as the founding Dean of the Jindal School of Government and Public Policy. He has an impressive track record of publications comprising books, articles, and UN policy reports, reflecting his inter-disciplinary research, teaching and policy experience in development programmes, human development, law, governance, institutions and policy.



# **Sudip Patra**

Sudip Patra completed his PhD in Financial Economics from Adam Smith Business School, Glasgow University in Scotland. He completed his M.Sc in finance with distinction from Coventry University UK, and also holds an associate fellowship in higher education teaching in UK. Currently he is working as an assistant professor in economics area at Jindal Global University Business School. He is working in the areas of Quantum Decision theory applied to economics and finance, Econophysics and

behavioural finance. He has been invited/visitor researcher to organisations like Aston University, UK, and IIT Bombay.