

Gennaro Auletta, born 1957, on August the 27th, Researcher at the University of Cassino, Aggregate Professor at the Pontifical Gregorian University, former Scientific Director of the STOQ Project, Fellow of the St Edmund's College of the University of Cambridge and associated of the von Hügel Institute of the University of Cambridge.

Director of 5 research projects: *Top-down causation in Biology* (2007-2010); Project on *Biological Evolution* (2007-2011); *Neuroscience Approach to Top-Down Causation* (2008-2011); *Experiment on Planarians Regeneration in Space* (2009-) together with the Genetics Laboratory of Barcelona (E. Salò, T. Adell) and approved by the European Space Agency (ESA); *Human Enhancement* (2011-). Organizer and Director of 9 workshops and 2 international conferences. Participation to more than 60 conferences and workshops. Lessons in several universities.

Author and editor of 16 books. Among them: *Quantum Mechanics* (together with G. Parisi and M. Fortunato), Cambridge University Press, 2009; *Cognitive Biology: Dealing with Information from Bacteria to Minds*, Oxford University Press, 2011; *Integrated Cognitive Strategies*, Rome, G&B Press; *Biological Evolution: Facts and Theories: A Critical Appraisal after 150 years after "The Origin of Species"* (Ed. with M. Leclerc and R. Martinez), Rome, G&B Press, 2011; *Brains Top-Down: Is Top-down Causation Challenging Neuroscience?* (Ed. with I. Colagè and M. Jeannerod), Singapore, World Scientific, 2013.

Author of more than 70 papers. Among them: "Top-Down Causation by Information Control: From a Philosophical Problem to a Scientific Research Program", *Journal of the Royal Society: Interface* **5** (2008): 1159—72 (with G. Ellis e L. Jaeger); "Cognitive Dynamics: From Attractors to Active Inference", *Proceedings of the IEEE* **102**: 427—45 (with K. Friston and B. Sengupta).

Areas of interest: Metaphysics, Philosophy of Nature, Logic, Foundations and Interpretation of Quantum Mechanics, Quantum Information, System Biology, Cognitive Biology, Top-Down Causation in Biology and Neurosciences, Mathematical Definition of Complexity.