## Beyond space/time and Mind/Body dualities, from Theology to Physics and Computing toward Biology

Giuseppe Longo CNRS – École Normal Supérieure, Paris https://www.di.ens.fr/~longo/

Respondent
Mitra Azar
Visiting Ph.D. researcher, Berkeley University
Aarhus Department of Information Studies
https://rhetoric.berkeley.edu/people/mitra-azar/

The origin of mathematical space is the result of a theological-pictorial invention, in the XIV century Italian painting. It shaped our dualistic construction (space/time) in Physics and paved the way to the *imitation* of the cartesian mind/body dualism, that made possible modern computing and the software/hardware split formalized by Turing. When moving from Physics to Biology the focus goes from conservation properties of a-priori phase spaces and discrete symmetries to the production of unpredictable phase spaces, symmetry breaking and continual (extended) critical transitions, within incompressible "durées" (as H. Weyl acknowledges in reference to Bergson).

The talk proposes a transversal reading of this different physical, computational and biological becoming. The respondent (Mitra Azar) will map Longo's transversal and perspectival epistemology in relation to the figure of orientation, disorientation and POV, and will facilitate the dialogue in reference to Longo's suggested reading, listed below.

- G. Longo, Sara Longo. Infinity of God and Space of Men in Painting, Conditions of Possibility for the Scientific Revolution. In "*Mathematics in the Visual Arts*" (R. Scheps and M.-C. Maurel ed.), ISTE-WILEY Ltd, London, 2020 https://www.di.ens.fr/users/longo/files/InfinitySpaceMenLoLo.pdf
- G. Longo. Confusing biological twins and atomic clocks. Today's ecological relevance of Bergson-Einstein debate on time. In "*Einstein vs Bergson. An enduring quarrel of time*", A. Campo and S. Gozzano, eds, De Gruyter, 2021 https://www.di.ens.fr/users/longo/files/TwinsVScloks.pdf
- G. Longo. Letter to Alan Turing. *Invited*, in Theory, Culture and Society, Posthumanities Special Issue, 2018 https://www.di.ens.fr/users/longo/files/Letter-to-Turing.pdf