



**Department of
Philosophy**
Faculty of Humanities
and Social Science in
Rijeka

and



HDAF
Croatian Society for
Analytic Philosophy

Invite you to:

a two-day CEASCRO project workshop

“Modelling the Predictive Brain”

Filozofski fakultet, Sveučilišna avenija 4, Rijeka

Thursday 12.07.2018. (Room 401)

Modelling the Predictive Brain I

Workshop with Professor Christoph Mathys

(Sissa, Trieste)

10.30–11.15	<i>Morning session 1: Introduction to the Predictive brain paradigm</i>
10.40–11.00	Coffee break
11.25–12.10	Morning session 2
12.10–13.30	Lunch break
13.30–14.15	<i>Afternoon session 1</i>
14.45–14.55	Coffee break
14.55–15.40	<i>Afternoon session 2</i>

Friday 13.07.2018. (Room 401)

Modelling the Predictive Brain II Workshop with Professor Christoph Mathys (Sissa, Trieste)

10.15–11.00	<i>Morning session 1</i>
11.00–11.15	Coffee break
11.15–12.00	<i>Morning session 2</i>
12.00–13.30	Lunch break
13.30–14.15	<i>Afternoon session 1</i>
14.45–14.55	Coffee break
14.55–15.40	<i>Afternoon session 2</i>

The workshop is organised by Marko Jurjako and Luca Malatesti and is an output of the project CEASCRO (<http://ceascro.ffri.hr>) that is funded by the Croatian Science Foundation (Grant n. 8071)



Invitation to a workshop “Modelling the Predictive Brain”

Project CEASCRO and the Croatian Society for Analytic Philosophy invite you to a two-day workshop with professor Christoph Mathys entitled “Modeling the Predictive Brain”.

Professor Mathys will provide an introduction to recent neurocomputational models of how the brain/mind works within the Predictive Processing or Predictive Brain framework. According to this paradigm the brain constantly tries to “guess” or predict the incoming sensory stimuli. Mismatches between the incoming stimuli and brain’s predictions (the so-called prediction errors) are then used to modify and update predictions which leads to dynamic self-organization, learning, and adaptive actions/responses. In the workshop, professor Mathys will provide a survey of theoretical and empirical models belonging to the Predictive Brain paradigm and discuss some consequences for how we should understand the structure and function of the brain, cognitive processes, pathologies, and maybe even consciousness.

Dates: **12.-13.7.2018.**

Venue: Faculty of Humanities and Social Sciences in Rijeka, room 401.

On Thursday it starts at 10:30, on Friday it starts at 10.15.

Short biography

Christoph Mathys is an Assistant Professor of Neuroscience at the Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy. He developed a Matlab-based software toolbox that allows for the quick and convenient estimation of parameters for a wide range of time series models, including many based on the Hierarchical Gaussian Filter (HGF). Mathys is an expert for systemic neuroscience, predictive coding and mental disorders. He was a fellow at the Wellcome Trust Center for Neuroimaging at UCL (United Kingdom) where he collaborated with Karl Friston.

Attendance is free of charge

If you would like to participate in the workshop, please send an email to Marko Jurjako (Department of Philosophy, FFRI) mjurjako@gmail.com.

Non-technical introductory reading material:

- Clark, Andy (2016). *Surfing Uncertainty*. Oxford: Oxford University Press
- Clark, A. (2013). Whatever next? Predictive brains, situated agents, and the future of cognitive science. *Behavioral and Brain Sciences*, 36(03), 181–204
- Interview with Karl Friston: https://www.youtube.com/watch?v=NIu_dJGyIQI
- Recent New Yorker article: <https://www.newyorker.com/magazine/2018/04/02/the-mind-expanding-ideas-of-andy-clark>

