

Meeting on dependently typed decision theories

Organiser: Nicola Botta, RD4, Transdisciplinary Concepts & Methods, Potsdam Institute for Climate Impact Research, Potsdam, DE.

- Place: room Nr. 205 “Amerika” on the second floor of Building A56, Telegrafenberg Campus, PIK-Potsdam, DE.
- Start: Tuesday 28/3, at 10.00
- End: Thursday 30/3, at 17.00
- Lunches in the Kantine.

Participants (for the full meeting):

- Nicola Botta PIK <https://www.pik-potsdam.de/members/botta>
- Cezar Ionescu Chalmers, Oxford <https://www.conted.ox.ac.uk/profiles/cezar-ionescu>
- Patrik Jansson Chalmers <https://www.chalmers.se/en/Staff/Pages/patrik-jansson.aspx>
- Pierre Lescanne ENS-Lyon <https://perso.ens-lyon.fr/pierre.lescanne/>
- Jules Hedges Oxford <https://www.cs.ox.ac.uk/people/julian.hedges/>
- Viktor Winschel Oicos.org <https://www.vikwin.de/>
- Philipp Zahn U. St. Gallen <http://www.philipp-zahn.com/>

A few more participated for single days: Eva Richter [CoeGSS project], Tim Richer, Sebastian, Axel (all from UniPotsdam).

Agenda

- 2017-03-28:
 - Welcome by Nicola Botta
 - Introduction by Cezar Ionescu: relation to the CoeGSS and GRACeFUL projects
 - Presentation round: Pierre, Patrik [GRACeFUL and CoeGSS project], Cezar [GRACeFUL and CoeGSS project], Jules, Sebastian, Nicola, Tim Richter, Axel, Eva Richter [CoeGSS project], Viktor, Philipp
 - Botta, Ionescu, Jansson: Finite Horizon problems and backward induction
 - Jules presentation on selection functions and Nash equilibria
 - Cezar Ionescu: Interval arithmetics and validated numerics
- 2017-03-29: Dependent types for game theory
 - Tutorial on Open Games, by Jules Hedges
 - Implementation of the Open Games tutorial, by Patrik Jansson
- 2017-03-30: Future plans
 - Cezar Ionescu: Reinforcement learning
 - Viktor: Industrial contacts and applications of game theory
 - Discussion on scalability