

Hilbert Bernays Summer School on Logic and Computation (LoCo)

Project presentations

Automatic Reasoning in the Automobile Industry

- Look-ahead SAT solvers (Andoni Duarte Pintado, Julen Urain)
- MaxSAT-applications (Sanaz Azimipour, Ana Isabel Tam)

Gödel's Incompleteness Theorems

- Some philosophical reflections on Gödel's Incompleteness Theorem and their relationship with Hilbert's Program (Joan Roselló Moya, Itiel Yizhaki)
- Compactness Theorem and its applications (James Leslie, Hodei Rodriguez, Andreas Tzionis, Andutz Zulaika)
- The deduction theorem (Tobias Kappé, Ítalo Oliviera, Gasper Stukelj)
- Does this follow from Gödel's theorems? (Hermógenes Oliviera, Tiago Rezende de Castro Alves)

Recursion and Complexity

- Cobham's characterization of FPtime (Gerard Farré Puiggalí, Lucas Sakizoglou, África Santos Planet)
- Ptime characterization by Bellantoni and Cook (Ana Alexandra Oliveira da Costa, Peter Skocovsky, Josué Tonelli Cueto)

Ordinal Analysis

- Solve exercise 3.24 of the handout (Bruno Dinis, Yoni Zohar)
- Solve exercise 3.25 of the handout (Maciej Kleczek, Shengyang Zhong)
- Solve exercise 3.25 of the handout (Hanna Karpenko, Ana Borges)
- Prove the Boundedness theorem (Miguel del Álamo Ruiz, Juan Aquilera, Anna Horska, Pedro Vitor Rodrigues da Conceicao)

History

- Axiomatization of Euclidean Geometry by David Hilbert (Daniel Martins, Maria de Lourdes Rocha de assis Jeanrenaud)