

COST Action CA20111

EuroProofNet

Activity report for WG 6 “Type Theory”

Goal of the Working Group

The aim of this WG is to develop a comprehensive theory of type theories, which

1. accounts for its domain-specific variants and the type theories currently used in proof assistants, and
2. allows for the modular reasoning about their syntax and semantics.

More info on the action and the WG on <https://europroofnet.github.io/>.

Activities 2021-2022

- Meetings:
 - Kick-off in Stockholm, May 2022
- Short Term Scientific Missions (STSMs) aka research visits
 - Evaluation Efficiency in Cubical Type Theories, Kovács (HU) -> Mörtberg (SE)
 - Signatures for second-order essentially algebraic theories, Bocquet (HU) -> Sattler (SE)

Summary Kick-Off

- 42 participants
- Ca. 12 funded from EPN
- Budget from EPN: EUR 8,000
- <https://europroofnet.github.io/wg6-kickoff-stockholm/>

Planned activities for 2022/23

1. Meeting

- a. Organizer: Paige Randall North
- b. Place: Utrecht University or colocation with TYPES
- c. Time: May 2023 (TYPES dates not yet announced)
- d. EPN Budget: EUR 10,450

2. STSMs

- a. Project Ahrens/Lumsdaine/North started at Kick-Off 2022
- b. ...