

ITC Conference Grant - APPLICATION FORM -

Action number: CA20111

Applicant name: Raheleh Jalali

Conference Details

Conference title: The 7th Workshop on Proof Theory, Modal Logic and Reflection Principles

Conference web-page: <https://wormshop2024.ugent.be/>

Conference venue: Ghent University, Ghent, Belgium

Conference start and end date: 02/09/2024 to 05/09/2024

Accepted contribution details

Title of the presentation: Admissibility of Visser's Rules in Intuitionistic Modal Logics

Type of the presentation: (oral/poster) Oral

Co-authors:

Other details of the presentation: specify here any additional details related to the contribution (e.g. title of the session / track of the conference programme in which the contribution is accepted)

Relevance of the Conference topic to the Action

Description of the relevance of the Conference to the Action (e.g., MoU objective, deliverable or WG task).

(max.500 word)

The Workshop on Proof Theory, Modal Logic, and Reflection Principles (Wormshop) is a significant event in the fields of proof theory and modal logics. These fields have gained substantial momentum over the past decade due to novel applications in the foundations of mathematics. The workshop covers various topics, including proof theory, computability and complexity, and logics of proofs, which are closely related to the objectives of WG2, WG3, and WG4.





In my presentation, I introduce a general and syntactically defined family of 'constructively acceptable' systems. Using these systems, I develop a polynomial-time algorithm to extract the computational content of proofs. The objectives of WG2 and WG3 include promoting the generation of detailed proofs from automated theorem provers, reducing computational complexity, and increasing the expressiveness of techniques for verifying program correctness. My presentation explores a new direction in proof theory, focusing on the complexity of proofs and automated theorem provers.

This work will significantly impact WG2 and WG3, as the proof-theoretic properties of logical calculi are becoming crucial tools for formal methods. The Workshop is an ideal venue to receive valuable feedback on my research, particularly concerning the EuroProofNet COST Action and its relevance to WG2 and WG3.

Motivation and expected impact

Description of the applicant's motivation to participate in the conference and potential impact on the applicant's career.

(max. 500 word)

As a young researcher, attending the 'Workshop on Proof Theory, Modal Logic, and Reflection Principles' is a great chance to meet well-known experts in the proof theory field. This experience will help me see how my work fits with the interests of the community. The event will create opportunities for new collaborations and strengthen ongoing research with colleagues from around the world. Presenting my research at this respected venue will improve my CV and increase the recognition of my work in the community. I am looking forward to getting helpful feedback and deepening my knowledge in this area. I expect that what I learn will have a big impact on my future research and help me build meaningful connections with other community members.
