ITC Conference Grant
- APPLICATION FORM[1] -

Action number: CA20111

Applicant name: David M. Cerna

Conference Details

Conference title: International Joint Conference on Automated Reasoning

Conference web-page: https://merz.gitlabpages.inria.fr/2024-ijcar/

Conference venue[2]: <u>Nancy, France</u> (organized by INRIA)

Conference start and end date: 01/07/2024 to 06/07/2024

Accepted contribution details

Title of the presentation:

1) Equational Anti-Unification over Absorption Theories (IJCAR 2024)

2) One is all you need: Second-order Unification without First-order Variables (UNIF 2024, under-review)

3) On Anti-Unification over Absorption, Associative, and Commutative Theories (UNIF 2024, under-review)

4) Computing Generalizers over Intersection and Union Type Theories (UNIF 2024, under-review)

Type of the presentation: oral

Co-authors: Julian Parsert (2), Mauricio Ayala-Rincon (1,3,4), Temur Kutsia (1,3,4), Gabriela Ferreira (4), Andres Gonzalez Barragan (1,3)

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).

IJCAR is the premier venue for research in automated reasoning and members of Working group 2 and Working group 5 typically publish at the conference.

Motivation and expected impact

In addition to the accepted paper at IJCAR 2024, the applicant submitted a workshop paper on second-order unification, which he would like to discuss with members of the unification community (2). A

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preliminary version of this paper can be found on Arxiv https://arxiv.org/abs/2404.10616. Additionally, He submitted an extension of the accepted paper to UNIF concerning a combination with other equational theories. The fourth submission concerns a new direction concerning anti-unification in various type theories which we would like to discuss with community. He expects these directions to influence the direction of the planned research with the above-mentioned collaborators.

Overall, the applicant has the funds to partially cover the trip. He is only looking to fund the restoration fee.