

# Fourth International Workshop on Systems and Algorithms for Formal Argumentation 2022 Proceedings

## Preface

Computational argumentation is a field within Artificial Intelligence studying representation, interaction, and computation of arguments. Application domains of approaches to computational argumentation include medicine, accounting, chemistry, and law, as well as other areas that benefiting from automated decision making. With strong roots in non-monotonic reasoning and logic programming, many models of argumentation inherit high computational complexity of argumentative reasoning.

Algorithms and systems dealing with argumentative reasoning are a core part of computational argumentation, also witnessed by the popular International Competition on Computational Models of Argumentation (ICCOMA). This workshop complements the competition and provides a forum to discuss and present novel approaches and ideas related to algorithmic approaches to all aspects of argumentation. Co-located with the International Conference on Computational Models of Argument (COMMA), a first workshop had been organised in Potsdam (Germany) in 2016, a second one in Warsaw (Poland) in 2018, and a third one virtually in 2020.

In this fourth edition, we received nine submissions which were all accepted as regular papers for this volume after a peer-review. Additionally, this volume contains an abstract of the invited talk on “Model Counting, its Relationship to Symbolic Quantitative AI, and a Glimpse into Practical Solving” by Johannes K. Fichte.

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