Preface

In recent years, research on intelligent systems that can explain their inferences and decisions to (human and machine) users has emerged as an important subfield of Artificial Intelligence (AI). In this context, the interest in symbolic and hybrid approaches to AI and their ability to facilitate explainable and trustworthy reasoning and decision-making – often in combination with machine learning algorithms – is increasing. Computational argumentation is considered a particularly promising paradigm for facilitating explainable AI (XAI). This trend is reflected by the fact that many researchers who study argumentation have started to i) apply argumentation as a method of explainable reasoning; ii) combine argumentation with other subfields of AI, such as knowledge representation and reasoning (KR) and machine learning (ML), to facilitate the latter's explainability; iii) study explainability properties of argumentation. Given the substantial interest in these different facets of argumentative XAI, this workshop aimed at providing a forum for focused discussions of the recent developments on the topic.

These workshop proceedings feature eleven papers on diverse perspectives of argumentative explainability. They cover the formal foundations of explaining argumentative inferences and argumentative properties of explanations, as well as applications of argumentation to facilitate explainability. We hope that the works presented in the proceedings appeal to the growing part of the core argumentation community that works on explainable argumentation, as well as to applied researchers who intend to use computational argumentation for explainability purposes.

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