

Preface

We are pleased to present the *Proceedings of the UAI 2015 Workshop on Advances in Causal Inference*, held in Amsterdam, the Netherlands, on July 16, 2015. The workshop was part of the 31st Conference on Uncertainty in Artificial Intelligence (UAI 2015), and is the fourth in a series of UAI workshops on causality. Previous editions include the *Causal Structure Learning workshop* (Catalina Island, UAI 2012), the *Approaches to Causal Structure Learning workshop* (Seattle, UAI 2013), and the workshop on *Causal Inference: Learning and Prediction* (Quebec City, UAI 2014).

The aim of the workshop series is to bring together researchers from different backgrounds, interested in tackling the challenges of causal inference from experimental and observational. The current edition sought to look into the challenges posed by causal inference on less standard (more realistic) data and generative models. In particular focusing on novel applications of causal methodologies, such as point processes, relational structures, and social networks. We especially encouraged contributions describing practical applications of causal methods.

In total we received 14 submissions, each of which was peer-reviewed by two or more program committee members. We accepted 6 for oral presentations, and another 7 as poster. In addition we were fortunate with two very interesting invited talks by Elizabeth Ogburn and Vanessa Didelez. See also the added material on the workshop website:

www.homepages.ucl.ac.uk/~ucgtrbd/uai2015_causal/papers.html

We want to thank the authors and presenters for their contribution, and the members of the program committee for their reviewing service. We also want to thank the organizing committee of the main UAI 2015 conference, in particular Jin Tian, Irina Rish, and Joris Mooij, for their assistance. We also want to thank Joris Mooij for his support in his role as chair of the previous Causal Inference: Learning and Prediction workshop. Finally, many thanks to the CEUR-WS team for hosting these proceedings.

October 2015

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