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Shohei Shimizu

# Statistical Causal Discovery: LiNGAM Approach


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# Preface

This monograph discusses statistical causal discovery methods for inferring causal relationships from data derived primarily from non-randomized experiments. Specifically, I focus on a non-Gaussian approach named LiNGAM. The LiNGAM approach uses a non-Gaussian data structure for model identification and can identify a much broader range of causal relationships than classic methods. This book aims to provide a concise summary of the basic ideas of the LiNGAM approach. More information on recent advances, applications, and available code packages can be found on the following website: https://www.shimizulab.org/lingam/lingampapers. I would be delighted if readers could get more familiar with the LiNGAM approach and become interested in working in the field of causal discovery.

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The original version of the book was revised: Missing mathematical symbols have been updated throughout. The correction to the book is available at https://doi.org/10.1007/978-4-431-55784-5_7

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