Record Nr. UNISA996309149703316 Autore Wronski Leszek Titolo Reichenbach's paradise: constructing the realm of probabilstic common "causes" / / Leszek Wronski; managing editor, Anna Michalska: language editor Sara Tavares Warsaw, [Poland];; Berlin, [Germany]:,: De Gruyter Open,, 2014 Pubbl/distr/stampa ©2014 **ISBN** 3-11-039934-2 Descrizione fisica 1 online resource (xii, 113 pages) Classificazione CC 3400 Disciplina 191 Causation Soggetti Philosophy (General) Probabilities. Mathematical statistics PHILOSOPHY / General Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Frontmatter -- Contents -- List of Figures / List of Tables --Acknowledgments / Introduction -- 1 The Principle of the Common Cause: Its Shapes and Content -- 2 Screening Off and Explanation: Formal Properties -- 3 The Principle of the Common Cause and the Bell Inequalities -- 4 The Principle of the Common Cause and the Causal Markov Condition -- 5 Causal Closedness -- 6 Causal Completability -- Conclusion -- Bibliography -- Index Sommario/riassunto Since its introduction by Hans Reichenbach, many philosophers have claimed to refute the idea - known as the common cause principle that any surprising correlation between any two factors that do not directly influence one another is due to some common cause. For example, falsity of the principle is frequently inferred from falsifiability of Bell's inequalities. The author demonstrates, however, that the situation is not so straightforward. There is more than one version of the principle formulated with the use of different variants of Reichenbach-inspired notions; their falsity still remains an open question. The book traces different formulations of the principle and

provides proofs of a few pertinent theorems, settling the relevant

questions in various probability spaces. In exploring mathematical and philosophical issues surrounding the principle, the book offers both philosophical insight and mathematical rigor.