Contents

Editors' Preface	ii
Words of Welcome from the DLMPST/IUHPST	v
Words of Welcome from the Local Organizing Committee	vi
INVITED PAPERS	
Maryanthe Malliaris	
Notes on Model Theory and Complexity	3
(Congress Section A.1)	
Dunja Šešelja	
What Kind of Explanations Do We Get from Agent-Based	
Models of Scientific Inquiry?	17
(Congress Section B.3)	
Jonathan Okeke Chimakonam	
Decolonising Scientific Knowledge: Morality, Politics	
and a New Logic	47
(Congress Section B.5)	
Michael Matthews	
Philosophy in Science Teacher Education	69
(Congress Section B.7)	
Gerhard Heinzmann	
Mathematical Understanding by Thought Experiments	85
(Congress Section C 1)	

Hans Halvorson	
Objective Description in Physics	111
(Congress Section C.2)	
Ray Turner	
Representation and Abstraction in Theories of Operations	
and Classes	133
(Congress Section C.6)	
SYMPOSIA AND THEMATIC PANELS	
Symposia and Thematic Panels Organized at the Congress	167
(a) Summaries of Symposia and Panels	
(i) DLMPST/IUHPST Commissions' Symposia	167
Panels	207
(ii) Contributed Symposia	209
(b) Other Contributed Symposia	283
APPENDICES	
Appendix A	287
Congress Sections	
Appendix B	288
List of Plenary, Invited and Contributed Talks	
Appendix C	317
Mario Bunge (1919–2020)	
Appendix D	319
Division of Logic, Methodology and Philosophy of Science and	
Technology of the International Union of History and Philosophy of	
Science and Technology Bulletin No. 23	