

CONTENTS

| | |
|--|-----|
| <i>Notes on contributors</i> | x |
| <i>Introduction</i> | xxi |
| | |
| PART I | |
| Epistemology and history | |
| (i) Frameworks and methods | 1 |
| 1 Religion and science in Christian theology F. LERON SHULTS | 3 |
| 2 Empiricism, conceptual cleavers, and the discourse on religion and science FRANCISCA CHO | 13 |
| 3 Science and religion: From the historian's perspective GEOFFREY CANTOR | 24 |
| 4 The physics of spirit: The indigenous continuity of science and religion BRIAN YAZZIE BURKHART | 34 |
| (ii) Historical overviews | 43 |
| 5 Islam and science AHMED RAGAB | 45 |
| 6 Christianity and science GARY B. FERNGREN | 58 |
| 7 Feminism, religion, and science J. JEANINE THWEATT-BATES | 69 |
| 8 Jews and the study of nature NOAH EFRON | 79 |

CONTENTS

PART II

Scientific and religious models of the world

| | |
|---|-----|
| (i) Cosmologies and cosmogonies | 91 |
| 9 Cosmology JOEL R. PRIMACK AND NANCY ELLEN ABRAMS | 93 |
| 10 Astronomy: From star gazing to astrobiology GRACE WOLF-CHASE | 103 |
| 11 Hindu cosmogony/cosmology GERALD JAMES LARSON | 113 |
| 12 Modern cosmology and religious naturalism DONALD M. BRAXTON | 124 |
| 13 Cosmology and theology ANTJE JACKELÉN | 135 |
| (ii) Quantum theoretical approaches and causality | 145 |
| 14 Quantum theoretical approaches and causality GREGG JAEGER | 147 |
| 15 Quantum mechanics and some Hindu perspectives VARADARAJA V. RAMAN | 156 |
| 16 Quantum theory, philosophy, and theology: Is there a distinct Roman Catholic perspective? WILLIAM R. STOEGER, S.J. | 169 |
| 17 Quantum theory, causality, and Islamic thought MEHDI GOLSHANI | 179 |
| (iii) Complexity, emergence, and eliminativism | 191 |
| 18 Eliminativism, complexity, and emergence TERRENCE DEACON AND TYRONE CASHMAN | 193 |
| 19 Philosophical implications of emergence TIMOTHY O'CONNOR | 206 |
| 20 Emergence and Christian theology JAMES W. HAAG | 213 |

CONTENTS

| | |
|--|-----|
| 21 Buddhism, emergence, and anti-substantialism CHARLES GOODMAN | 223 |
| (iv) Evolutionary biology and suffering | 231 |
| 22 The biological antecedents of human suffering URSULA GOODENOUGH | 233 |
| 23 Suffering through to something higher HOLMES ROLSTON, III | 248 |
| 24 Magic, monotheism and natural evil: Classical and modern Jewish responses to suffering LAWRENCE TROSTER | 259 |
| 25 The problem of suffering in theistic evolution TED PETERS | 270 |
| (v) The cognitive sciences and religious experience | 283 |
| 26 The cognitive sciences: A brief introduction for science and religion MICHAEL L. SPEZIO | 285 |
| 27 Cognitive science and classical Buddhist philosophy of mind RICHARD K. PAYNE | 296 |
| 28 Christianity and the cognitive sciences CHARLENE P. E. BURNS | 308 |
| 29 Hinduism and the cognitive sciences: Challenges, contrasts, and confluences STEPHEN KAPLAN | 320 |
| (vi) Ecology and the integrity of nature | 331 |
| 30 Frontiers in religion and ecology: Notes on the new ecology and the creation of value NATHANIEL F. BARRETT AND WILLIAM R. JORDAN, III | 333 |
| 31 Judaism and the science of ecology HAVA TIROSH-SAMUELSON | 345 |
| 32 Asian religions, ecology, and the integrity of nature CHRISTOPHER KEY CHAPPLE | 356 |

CONTENTS

| | | |
|--|---|-----|
| 33 | Meaning-making practices and environmental history: Toward an ecotonal theology WHITNEY A. BAUMAN | 368 |
| PART III | | |
| Religion and science, values, and public policy | | |
| (i) | Origins | 379 |
| 34 | Origins MICHAEL RUSE | 381 |
| 35 | Creation and liberation: The ontology of American Indian origins SCOTT L. PRATT | 391 |
| 36 | Origins: The Hindu case C. MACKENZIE BROWN | 403 |
| 37 | Christian responses to evolution CHRIS DORAN | 414 |
| 38 | Jewish origins: Cosmos, humanity, and Judaism SHAI CHERRY | 425 |
| (ii) | Biotechnology and justice | 437 |
| 39 | Biotechnology and justice RONALD COLE-TURNER | 439 |
| 40 | Justice and biotechnology: Protestant views KAREN LEBACQZ | 449 |
| 41 | Muslim ethics and biotechnology EBRAHIM MOOSA | 455 |
| 42 | Biotechnology and justice: Roman Catholic perspectives B. ANDREW LUSTIG | 466 |
| 43 | Justice in the margins of the land: Jewish responses to the challenges of biotechnology LAURIE ZOLOTH | 476 |
| (iii) | Non-human cognition: animal cognition and artificial intelligence | 485 |
| 44 | Ecce Pan: Primate theory of mind and the notion of awe DAVID HARNDEN-WARWICK AND JESSE M. BERING | 487 |

CONTENTS

| | | |
|-----------|--|-----|
| 45 | Animals as religious and soteriological beings: A Hindu perspective ELLISON BANKS FINDLY | 497 |
| 46 | Animals and Christianity GREGORY R. PETERSON | 508 |
| 47 | Does the Buddha have a theory of mind?: Animal cognition and human distinctiveness in Buddhism JONATHAN C. GOLD | 520 |
| | (iv) Aging and life extension | 529 |
| 48 | Prospects for the biomedical postponement of aging: Technical context for a theological debate AUBREY D. N. J. DE GREY | 531 |
| 49 | Response to Aubrey de Grey from the perspective of Buddhism DEREK F. MAHER | 540 |
| 50 | Cosmic aliveness: Nurturing life in the Daoist tradition LIVIA KOHN | 549 |
| 51 | A Christian theological response to Aubrey de Grey's prospects for the biomedical postponement of aging: Or: what does it mean to live long and prosper? ANN MILLIKEN PEDERSON | 558 |
| | (v) Transhumanism and artificial intelligence | 567 |
| 52 | Transhumanism and cognitive enhancement DANIEL S. RIZZUTO AND JOSHUA W. FOST | 569 |
| 53 | Cyborgs, robots, and eternal avatars: Transhumanist salvation at the interface of brains and machines ROBERT M. GERACI | 578 |
| 54 | Human-directed evolution: A Christian perspective NOREEN HERZFELD | 591 |
| 55 | American Indians, transhumanism and cognitive enhancement THURMAN LEE HESTER, JR. | 602 |
| | <i>Index</i> | 611 |