

Contents

1	The Expanding Universe of Particles	1
2	The Spark that Broke the Atom	5
3	Nature's Own Accelerator	11
4	Cracking the Nucleus	31
5	The Spiral Path to Nirvana	41
6	Then It Rained Particles	67
7	Rings of Earth: The Synchrotron	81
8	The Next Generation: Supersynchrotrons	115
9	Linear Accelerators, the Straight Story	131
10	The Lotus Posture, Symmetry, Gauge Theories, and the Standard Model	147
11	Collision Course	171
12	Particle Detector Experiments	185
13	The Snake Charmer: The Large Hadron Collider	199
	Index	219