



COSMOS
CARL SAGAN

ABRACADABRA

Science Greats

THE STORY OF COSMIC EVOLUTION,
SCIENCE AND CIVILISATION



CONTENTS

	Introduction	11
1	The Shores of the Cosmic Ocean	19
2	One Voice in the Cosmic Fugue	34
3	The Harmony of Worlds	58
4	Heaven and Hell	92
5	Blues for a Red Planet	124
6	Travelers' Tales	157
7	The Backbone of Night	185
8	Travels in Space and Time	220
9	The Lives of the Stars	241
10	The Edge of Forever	268
11	The Persistence of Memory	296
12	Encyclopaedia Galactica	319
13	Who Speaks for Earth?	346
	Appendix 1: <i>Reductio ad Absurdum</i> and the Square Root of Two	377
	Appendix 2: The Five Pythagorean Solids	380
	For Further Reading	383
	Index	397