Preface

This book is about the history of the Universe, not only what happened but why it happened. In other words, it is about cosmology which is actually a branch of physics.

Ever since I first met them, I have been fascinated by physics and cosmology. With physics that was when I was 11 years old and with cosmology when I was 43 in 1983. Before encountering cosmology I worked on the theory of elementary particles, whose collisions are observed at machines like the one at CERN in Geneva. That turned out to be useful, because the collisions now observed in the laboratory happened also in the early Universe.

When I first encountered cosmology, it had recently been suggested that all of the structure in the Universe originated as a random quantum process, taking place at some very early time. The idea was both simple and remarkable, and I quickly published some research on it. That was easier in those days than it is now because the subject had hardly any previous history and there were only a few relevant papers.

More research followed, and along the way a couple of textbooks with my colleague Andrew Liddle. Those are academic books aimed mostly at other researchers. This book, by contrast, is intended to be accessible to everyone. As we need physics for cosmology, a few chapters of the book are devoted to it, and more physics is introduced as we go along. If you know physics already, you will be able to skip some or all of those bits.

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