Chapter 7
Conclusion

In the pages of this book we have traveled in space and time, for very small and very large distances, sometimes in the past and sometimes in the future. We have introduced things that we do not know exactly how to explain, and we have provided explanations and models for things that probably we will never experience.

But, above all, we have tried to imagine the beauty and the symmetry hidden in the unity of the most different forms of matter and energy, and in the simplicity of the most complicated physical processes.

We have also realized that maybe there are no limits to our level of understanding the physical reality in which we are immersed, because, whenever we believe we have built an efficient, complete, and ultimate model, there are to appear new interactions, new spatial dimensions, new fundamental objects, new physical effects, new cosmological eras . . .

My conclusion, at this point, is very simple. Before finding a satisfactory solution for all the problems that physics currently poses to our attention (for instance, what is the theory able to describe all the fundamental forces of Nature, how many are the dimensions of space, how was born our Universe, how it evolved in time, and what will be its future evolution, etc.), I am sure we have still in front of us many years of work and—definitely—of surprising findings.

M. Gasperini, *Gravity, Strings and Particles*, DOI 10.1007/978-3-319-00599-7_7,