OUR CHOICE

KNOCKING ON HEAVEN'S DOOR
by LISA RANDALL
Vintage £9.99
ebook £10.43

Randall — a professor of particle physics and cosmology at Harvard — says she needed to vent her frustration about “the way science is currently understood and applied”. This book, written with dry wit and ice-cool clarity, is the result.

It is easy to be overwhelmed by big science but, as Randall points out, scientists don’t usually set out to answer the big questions; they are much more likely to become obsessed about some small question that they then worry at tenaciously, sometimes for years.

The irony of the Large Hadron Collider at Cern, for instance, is that although it is enormous, what is truly jaw-dropping about it is the fineness of the measurements being made. Individual proton collisions carry no more kinetic energy than two mosquitoes flying into each other, and even then most of the energy of the collision is carried forward with the rest of the beam as it makes its 11,000 circuits of the tunnel every second.

The history of physics is one of increasingly subtle and refined measurement made by increasingly ingenious and indirect means.

Knocking on Heaven’s Door is a book that anyone at all interested in science must read. It is surely the science book of the year.

Christopher Potter