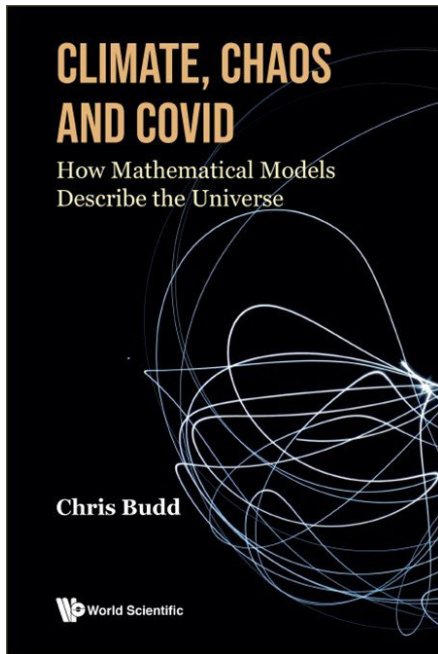


## CLIMATE, CHAOS AND COVID

How Mathematical Models Describe the Universe



Chris Budd  
(University of Bath, UK)

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### ABOUT THE BOOK

Mathematical models are very much in the news now, as they are used to make decisions about our response to such vital areas as COVID-19 and climate change. Frequently, they are blamed for a series of dubious decisions, creating much concern amongst the general public. However, without mathematical models, we would have none of the modern technology that we take for granted, nor would we have modern health care, be able to forecast the climate, cook a potato, have electricity to power our home, or go into space.

By explaining technical mathematical concepts in a way that everyone can understand and appreciate, *Climate, Chaos and COVID: How Mathematical Models Describe the Universe* sets the record straight and lifts the lid off the mystery of mathematical models. It shows why they work, how good they can be, the advantages and disadvantages of using them and how they make the modern world possible. The readers will be able to see the impact that the use of these models has on their lives, and will be able to appreciate both their power and their limitations.

The book includes a very large number of both short and long case studies, many of which are taken directly from the author's own experiences of working as a mathematical modeller in academia, in industry, and between the two. These include COVID-19 and climate and how maths saves the whales, powers our home, gives us the material we need to live, and takes us into space.

## READERSHIP

Keen high school students, teachers, STEM undergraduates and postgraduates interested in the field of applied mathematics and mathematical modelling; policymakers and decision makers in relevant industries such as Education, Environment, Health and Social Care, and Energy; members of the general public who want to understand more of the mathematics behind the models used in everyday life.

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