ENIGMAS

Arising from the 2020 Darwin College Lectures, this book presents eight essays from prominent public intellectuals on the theme of Enigmas. Each author examines this theme through the lens of their own particular area of expertise, together constituting an illuminating and diverse interdisciplinary volume.

Enigmas features contributions by professor of physics Sean M. Carroll, author Jo Marchant, writer and broadcaster Adam Rutherford, professor of earth sciences Tamsin A. Mather, professor of the history of the book Erik Kwakkel, reader in cultural history Tiffany Watt Smith, mathematician and public speaker James Grime, assistant professor of positive AI J. Derek Lomas, and explorer Albert Y.-M. Lin. This volume will appeal to anyone fascinated by puzzles and mysteries, solved and unsolved.

EMILY JOAN WARD is a medieval historian examining change and continuity between the eleventh and thirteenth centuries, and a British Academy Postdoctoral Fellow at The University of Edinburgh.

ROBIN REUVERS is a mathematical physicist interested in quantum mechanics and statistical mechanics, and a tenure-track researcher at Roma Tre University.

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He has published 10 monographs and edited volumes and runs the blog *Medievalbooks.nl.* Among his recent publications is *Books Before Print* (Arc Humanities Press, 2018), a textbook aimed at undergraduate and graduate teaching. His work is featured in a variety of public news outlets such as BBC World Service, CBC radio, CNN, and the *Smithsonian Journal.*

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Jo Marchant is an award-winning author, science journalist, and speaker. She has written several popular science books, including *Decoding the Heavens: Solving the Mystery of the World's First Computer* and the *New York Times* bestseller *Cure: A Journey into the Science of Mind over Body* (both of which were shortlisted for the Royal Society science books prize), and most recently *The Human Cosmos: A Secret History of the Stars.* Her writing explores the nature of humanity and our universe, from the mind–body connection to the mysteries of past civilisations and the awesome power of the night sky. She has a PhD in genetics and medical microbiology from St

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Tamsin A. Mather is a volcanologist and Professor of Earth Sciences at the University of Oxford, where she has been on the faculty since 2006. She has Master's degrees in Chemistry and History and Philosophy of Science from the University of Cambridge. After a year working in Germany and Brussels doing a placement for the European Commission, she returned to Cambridge to complete a PhD on the atmospheric chemistry of volcanic plumes and their environmental effects. Since then, her research has broadened to explore the diverse ways in which volcanoes interact with Earth's environment, the processes driving volcanic unrest and eruptions, the hazards they pose, and their resource potential. Before joining Oxford, she was a Research Council Fellow at the UK Parliamentary Office of Science and Technology and a Royal Society Dorothy Hodgkin Research Fellow. She won a UNESCO/L'Oréal UK & Ireland Women in Science award in 2008, won the Philip Leverhulme prize in 2010, was UK Mineralogical Society Distinguished Lecturer in 2015/16, was the winner of the 2018 Rosalind Franklin Award and Lecture from the Royal Society, and was elected to the Academia Europaea in 2021. She has spoken at numerous science festivals, including New Scientist Live and the Cheltenham Science Festival, and has participated in several TV and radio programmes and documentaries, including Radio 4's *Life Scientific* with Jim Al-Khalili and *The Infinite Monkey Cage* with Brian Cox.

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Ever Lived and *The Book of Humans.* His most recent book, *How to Argue with a Racist* (which was a *Sunday Times* bestseller and BBC Radio 4's Book of the Week), shows how science and history can be powerful allies against bigotry. He is now an Honorary Fellow at UCL and teaches on the history of eugenics, race science, genetics, and science communication.

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Tiffany Watt Smith is the author of three books about the history of emotions: *Schadenfreude* (2018), *The Book of Human Emotions* (2015), which tells the stories of 154 emotions from around the world, and *On Flinching* (2013). Her books have so far been translated into 10 languages. Educated at the universities of Cambridge and London, she is now based at Queen Mary University of London, where she is a Reader in Cultural History and Director of the Centre for the History of Emotions. In 2019 she was awarded a Philip Leverhulme Prize for her research. Her writing has appeared in *The Guardian*, *BBC News Magazine*, and *The New Scientist*, among others, and her TED talk 'The History of Human Emotions' has been viewed more than four million times.

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