

William Parnell is Professor of Applied Mathematics in the School of Mathematics at the University of Manchester (UK). He received a First Class degree in Applied Mathematics from the University of Bristol (UK) in 1999, before moving to the University of Oxford (UK) to study for a Masters in Mathematical Modelling and Scientific Computing, graduating with distinction in 2000. After a year travelling he began a PhD in 2001 at the University of Manchester under the supervision of I. David Abrahams, completing this in 2004.



William's research interests reside principally in the development of new mathematical techniques to understand the mechanical properties of inhomogeneous materials and the dynamic behaviour of particulate media, meaning how waves propagate through materials with complex structure. More recently his work has involved linking theory with experiments in order to develop new composites and metamaterials. He has a particular interest in understanding the constitutive behaviour of complex soft solids and tuning this via novel fillers. He leads the Mathematics of Waves and Materials (MWM) research group at Manchester, which consists of five Faculty and a thriving group of Postdocs, PhD students and Masters students. From 2013-2022 he held an EPSRC Research Fellowship, which allowed him to devote a large proportion of his time to research activities. William was Head of Research in the Department of Mathematics at Manchester from 2018-2023 and more recently he has taken on the role of School of Natural Sciences Business Engagement and Innovation academic lead.

William has held visiting positions at Universite Paris 6 and 12 (France), University of Trento (Italy), University of Oxford (UK) and Colorado School of Mines and Rutgers (USA). He has published more than 70 research papers and 2 book chapters. He is a Fellow of the Institute of Mathematics and its Applications (UK) and became Editor in Chief of the international journal *Wave Motion* in 2017. In 2019 he was awarded a Whitehead Prize by the London Mathematical Society "*for highly novel and extensive research contributions in the fields of acoustic and elastodynamics metamaterials and theoretical solid mechanics, as well as excellence in the promotion of mathematics in industry*". He has given numerous Keynote and Plenary lectures including at Kozwaves 2015, IMECE 2019 and at BAMC 2022. In June 2023 he chaired the international conference *Phononics 2023* in Manchester, hosting over 200 of the world's leading experts in the field.