

Mathematics, Metamaterials and Meteorites

Professor David Abrahams

(Director, Isaac Newton Institute for Mathematical Sciences)

6.00pm on Thursday 1st November 2018

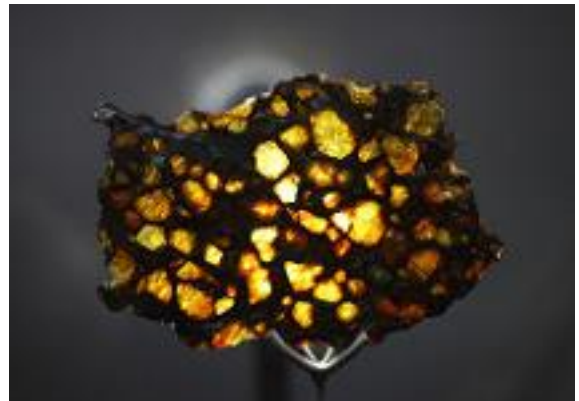
Refreshments at 5.45pm

University of Manchester

Room G107, Alan Turing Building, M13 9PL

Abstract

This talk will discuss several application areas of current interest to the speaker, indicating how applied mathematics can answer phenomenological questions, make new predictions, and assist industry in product design. In particular, we shall show how simple asymptotic techniques, developed by David Crighton and others, can be employed to reduce low-frequency noise from domestic appliances. As time allows, the talk will also focus more broadly on knowledge exchange in the UK.



About the Speaker,

David has devoted research effort to the broad area of applied mathematics, and specifically to the theoretical understanding of wave processes, since graduating in 1982 with a PhD in applied mathematics from Imperial College London. Prior to taking up the post of Director of the Isaac Newton Institute, he held the Beyer Chair of Applied Mathematics at the University of Manchester.

In recent years his research has diversified somewhat to also cover areas away from waves. For example, he has worked on topics as diverse as mathematical finance, nonlinear viscoelasticity, melting of debris-covered glaciers, and entrapment of meteorites in Antarctic ice.

He was awarded the 2017 David Crighton Medal for his service to both mathematics and the mathematical community.

For further information, please contact Margaret Eastwood margareteastwoodimanw@gmail.com

No charge is made to attend meetings. Non-IMA members are welcome.

Please see <https://ima.org.uk/branches/north-west/> for the 2018/19 Draft Lecture Schedule