## Funded PhD studentships

#### EPSRC Case award with an enhanced stipend (UK residents only)

Statistical analysis of risk, failure, and extreme event propagation in the airline industry using multi-level networks:

https://www.findaphd.com/search/ProjectDetails.aspx?PJID=84265&LID=1184

# Modelling and Analytics for a Sustainable Society (UK and EU students, up to 2 studentships available)

See the website for this PhD program:

https://www.nottingham.ac.uk/mathematics/prospective/research/mass/mass.aspx

### Maths with Engineering (UK residents only, up to 2 studentships available)

Advanced stability assessment methods for power grids dominated by renewable energy sources: https://www.findaphd.com/search/projectdetails.aspx?P[ID=82564

Model reduction and homogenisation for filtration and adsorption: <a href="https://www.findaphd.com/search/ProjectDetails.aspx?PJID=87190&LID=1184">https://www.findaphd.com/search/ProjectDetails.aspx?PJID=87190&LID=1184</a>

Using machine learning and molecular simulation to understand the liquid-gas phase behaviour in nano-pores: https://www.findaphd.com/search/ProjectDetails.aspx?PJID=85476&LID=1184

Modelling gas uptake in shale and coal:

https://www.findaphd.com/search/ProjectDetails.aspx?PJID=85475&LID=1184

 $Wave\ propagation\ in\ complex,\ textured,\ stochastic\ media:$ 

https://www.findaphd.com/search/ProjectDetails.aspx?PJID=84606&LID=1184

Modelling wave propagation in meta-materials: a graph network approach: <a href="https://www.findaphd.com/search/ProjectDetails.aspx?PJID=84605&LID=1184">https://www.findaphd.com/search/ProjectDetails.aspx?PJID=84605&LID=1184</a>

Bayesian inversion in resin transfer moulding:

https://www.findaphd.com/search/ProjectDetails.aspx?PJID=83954&LID=1184

 $\label{thm:experimental} Experimental\ and\ mathematical\ models\ for\ avalanche\ fronts:$ 

https://www.findaphd.com/search/ProjectDetails.aspx?PJID=80458&LID=1184

Multiscale Methods for Hysteresis Effects in Geomechanics:

https://www.findaphd.com/search/ProjectDetails.aspx?PJID=79128&LID=1184

### Maths and Energy (UK residents only, up to 2 studentships available)

Energy storage bed dynamics -the ever-expanding magnesium bed conundrum: <a href="https://www.findaphd.com/search/ProjectDetails.aspx?PJID=82574&LID=1184">https://www.findaphd.com/search/ProjectDetails.aspx?PJID=82574&LID=1184</a>

Uncertainty quantification via hydrogeophysical inversion:

https://www.findaphd.com/search/ProjectDetails.aspx?PJID=82572&LID=1184

First-principles calculation of physical properties via machine learning:

https://www.findaphd.com/search/ProjectDetails.aspx?PJID=82568&LID=1184

Modelling energy localisation and propagation in nonlinear lattices:

https://www.findaphd.com/search/ProjectDetails.aspx?PJID=80460&LID=1184