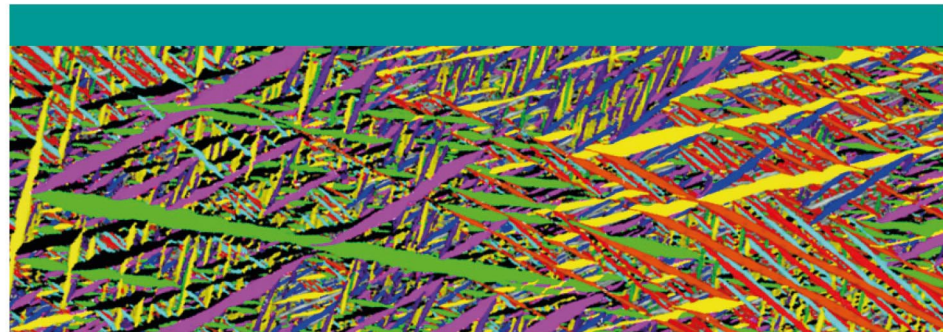# Isaac Newton Institute for Mathematical Sciences

Programmes & Workshops 2019

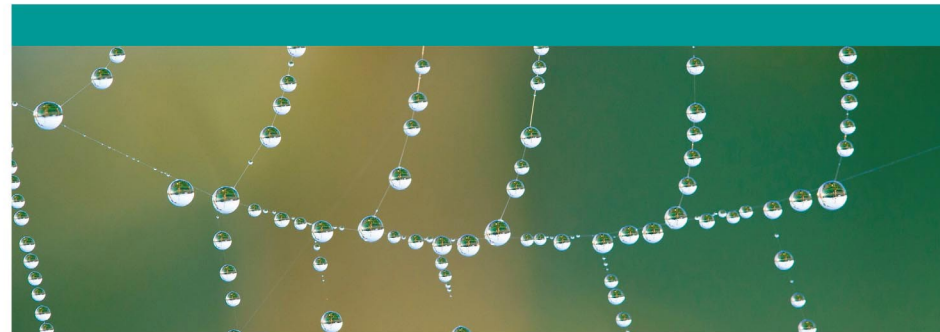## The mathematical design of new materials

3rd January 2019 to 28th June 2019

W Optimal design of complex materials
14th January 2019 to 18th January 2019

SW Mathematical design of new materials - strategies and algorithms for the design of alloys and metamaterials
11th March 2019 to 15th March 2019

W Spring school on the mathematical design of materials
25th March 2019 to 29th March 2019

W Optimal design of soft matter
13th May 2019 to 17th May 2019

W New trends and challenges in the mathematics of optimal design
10th June 2019 to 14th June 2019
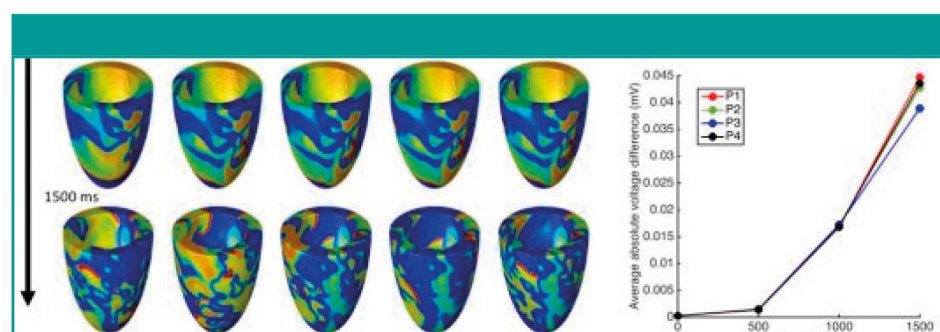
FOLLOW ON WORKSHOP
Growth form and self-organisation
25 March 2019 to 29 March 2019

Approximation, sampling and compression in data science

3rd January 2019 to 26th June 2019

W Challenges in optimal recovery and hyperbolic cross approximation
18th February 2019 to 22nd February 2019

SW Mathematics of data: structured representations for sensing, approximation and learning
28th May 2019 to 31st May 2019

W Approximation, sampling, and compression in high dimensional problems
17th June 2019 to 21st June 2019

The fickle heart
13th May 2019 to 7th June 2019

W Uncertainty quantification for cardiac models
5th June 2019 to 7th June 2019

The mathematics of energy systems

3rd January 2019 to 3rd May 2019

W Flexible operation and advanced control for energy systems
7th January 2019 to 11th January 2019

W Electricity systems of the future: incentives, regulation and analysis for efficient investment
18th March 2019 to 22nd March 2019

SW Mean-field equations and their applications
1st April 2019 to 5th April 2019

SW Second Leeds meeting on stochastic control and games under ambiguity
8th April 2019 to 13th April 2019

W Closing workshop: Looking forward to 2050
29th April 2019 to 3rd May 2019

SATELLITE FOLLOW ON WORKSHOP
Big proof
27 May 2019 to 31 May 2019

Geometry, compatibility and structure preservation in computational differential equations
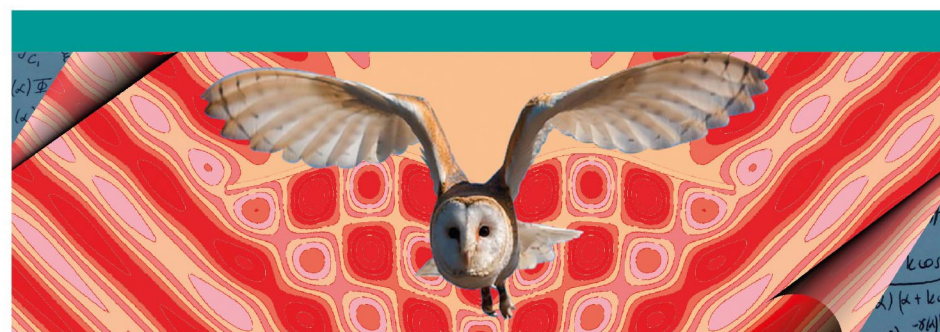
3rd July 2019 to 19th December 2019

W Tutorial workshop
8th July 2019 to 12th July 2019

W Structure preservation and general relativity
30th September 2019 to 4th October 2019

SW Perspectives on geometric and topological computation of differential equations
9th December 2019 to 13th December 2019

Mathematical and Statistical Challenges in Landscape Decision Making
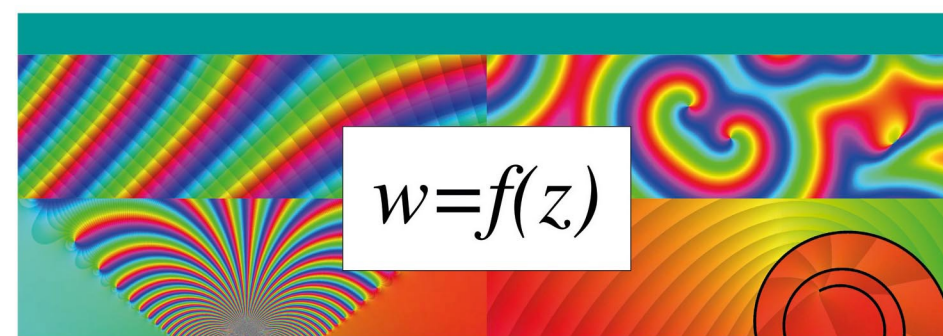
3rd July 2019 to 2nd August 2019

W Current status and key questions in Landscape Decision making
Wed 3rd Jul 2019 - Fri 5th Jul 2019

W Progress on novel mathematics and statistics for Landscape Decisions, including priorities for further research
Wed 31st Jul 2019 - Fri 2nd Aug 2019

Bringing pure & applied analysis together via the Wiener-Hopf technique, its generalisations and applications

5th August 2019 to 30th August 2019

W Factorisation of matrix functions: new techniques and applications
12th August 2019 to 16th August 2019

Complex analysis: techniques, applications and computations

2nd September 2019 to 19th December 2019

W The complex analysis toolbox: new techniques and perspectives
9th September 2019 to 13th September 2019

W Complex analysis in mathematical physics and applications
28th October 2019 to 1st November 2019

W Computational complex analysis
9th December 2019 to 13th December 2019

$w = f(z)$

W WORKSHOP **SW** SATELLITE WORKSHOP