

Fractal Geometry

and a celebration of Kenneth Falconer's 70th birthday

Monday 3 – Friday 7 July 2023

MONDAY 3 July 2023	
09.00 – 09.50	Registration and Refreshments
09.50 – 10.00	Welcome and Housekeeping
10.00 - 10.50	Pertti Mattila , University of Helsinki <i>Hausdorff dimension and principal values of singular integrals</i>
10.50 - 11.30	Refreshments
11.30 - 12.20	Julian Barral , Sorbonne Paris Nord University <i>On the dimensions of random statistically self-affine Baransky carpets and sponges.</i>
12.20 – 14.00	Lunch
14.00 - 14.50	Peter Varju , University of Cambridge <i>Quantitative aspects of Bourgain's discretized sum-product theorem</i>
14.50 - 15.30	Refreshments
15.30 - 16.20	Tuomas Orponen , University of Jyväskylä <i>Projections, Ahlfors-regularity, and the ABC sum-product problem</i>
16.30 - 18.00	Welcome Reception, hosted at ICMS

TUESDAY 4 July 2023	
09.30 - 10.20	Mark Pollicott , University of Warwick <i>The dimension of the Feigenbaum attractor.</i>
10.20 - 11.10	Alexia Yavicoli , The University of British Columbia <i>Thickness and a Gap Lemma in \mathbb{R}^d</i>
11.10 - 12.00	Refreshments
12.00 - 12.50	Sascha Troscheit , University of Oulu <i>Metric spaces in random geometry: dimension theory and applications</i>
12.50 - 14.30	Lunch
14.30 - 15.20	Henna Koivusalo , University of Bristol <i>Dimension of τ-badly approximable points as a subset of τ-well approximable points</i>
15.20 - 16.00	Refreshments
16.00 – 18.00	Lightning talks (5 mins) Roope Anttila (University of Oulu); Amlan Banaji (University of St Andrews); Ryan Bushling (University of Washington); Zhou Feng (The Chinese University of Hong Kong); Kornélia Héra (Alfréd Rényi Institute of Mathematics); István Kolossváry (University of St Andrews); Caiyun Ma (The Chinese University of Hong Kong); William O'Regan (University of Warwick); Rudolf Daniel Prokaj (Alfréd Rényi Institute of Mathematics); Alexi Pyörälä (University of Oulu); Alex Rutar (University of St Andrews); Lauritz Streck (University of Cambridge); Andrew Vince (University of Florida); Jian-Ci Xiao (The Chinese University of Hong Kong)

WEDNESDAY 5 July 2023	
09.30 - 10.20	Pablo Shmerkin , University of British Columbia <i>Some recent developments on the Falconer distance set problem</i>
10.20 - 11.10	Han Yu , University of Warwick <i>Arithmetic properties of missing-digit numbers</i>
11.10 – 11.40	Refreshments
11.40 – 12.30	Tamas Keleti , Eötvös Loránd University, Budapest <i>Lipschitz images of the Cantor set</i>
12.30 – 12.50	Kenneth Falconer , University of St Andrews <i>Short Talk: Some problems in fractal geometry</i>
12.50 – 14.30	Lunch

THURSDAY 6 July 2023	
09.30 - 10.20	De-Jun Feng , The Chinese University of Hong Kong <i>Dimensions of arithmetic sums of typical self-affine sets</i>
10.20 - 11.10	Maarit Jaarvenpaa , University of Oulu <i>Talk Title</i>
11.10 - 12.00	Refreshments
12.00 - 12.50	Thomas Jordan , University of Bristol <i>The shrinking target problem for certain self-affine sets.</i>
12.50 - 14.30	Lunch
14.30 - 15.20	Rhiannon Dougall , Durham University <i>Proving a ratio limit theorem for random walks on groups using the variational principle.</i>
15.20 - 16.00	Refreshments
16.00 - 16.50	Natalia Jurga , University of St Andrews <i>Hausdorff dimension of the Rauzy gasket</i>
19.30	Workshop Dinner <i>METRO @APEX GRASS MARKET HOTEL (31-35 Grassmarket EH1 2HS)</i> 19:30 – Drink reception 20:00 – Conference dinner

FRIDAY 7 July 2023	
09.30 - 10.20	Martina Zahle , Institute of Mathematics, University of Jena <i>Geometric Parameters For Different Classes Of Fractals</i>
10.20 - 11.10	Steffen Winter , Karlsruhe Institute of Technology <i>Regularity properties of parallel volume and parallel surface area</i>
11.10 - 12.00	Refreshments
12.00 - 12.50	Jiaxin Hu , Tsinghua University <i>A dichotomy on the self-similarity of graph-directed attractors</i>
12.50 - 14.30	Packed lunch