

# Scottish-Basque meeting on analysis

Monday 28 – Wednesday 30 October 2024

*The programme is subject to change. All times are Greenwich Mean Time (GMT).*

MONDAY 28 OCTOBER 2024	
09.00 – 09.15	Registration and Welcome
09.15 – 10.00	<b>Leonardo Tolomeo</b> , University of Edinburgh <i>theme 1: harmonic</i> <i>Statistical mechanics of the focusing nonlinear Schrödinger equation and soliton resolution conjecture</i>
10.00 – 10.45	<b>Ioaninis Parisis</b> , Basque Center for Applied Mathematics <i>theme 1: harmonic</i> <i>Directional square functions</i>
10.45 – 11.15	Coffee break
11.15 – 11.45	<b>Yannis Galanos</b> , University of Edinburgh <i>Early Career Talk</i> <i>Takeya-Brascamp-Lieb Inequalities in the Heisenberg Group</i>
11.45 – 12.15	<b>Yann Bourroux</b> , University of the Basque Country <i>Early Career Talk</i> <i>Three balls inequalities for Schrödinger operators on periodic graphs</i>
12.15 – 13.30	Lunch break
13.30 – 14.00	<b>Sergei Iakunin</b> , Basque Center for Applied Mathematics <i>Early Career Talk</i> <i>Corner singularity in the polygonal vortices and in the reconnection phenomenon</i>
14.00 – 14.30	<b>James Coe</b> , University of Edinburgh <i>Early Career Talk</i> <i>Sharp quasi-invariance threshold for the cubic Szegő equation</i>
14.30 – 15.15	<b>3x micro talks</b> (15mins each)
15.15 – 15.45	Coffee break
15.45 – 16.30	<b>Lucrezia Cossetti</b> , University of the Basque Country <i>theme 3: variational</i> <i>Spectral stability via the method of multipliers</i>
16.30 – 17.15	<b>Justin Forlano</b> , University of Edinburgh <i>theme 2: dispersive</i> <i>Invariant measures for mKdV and KdV on the line</i>
17.15 – 18.00	Welcome Reception, hosted at EFI

TUESDAY 29 OCTOBER 2024	
09.15 – 10.00	<b>Pedro Caro</b> , Basque Center for Applied Mathematics <i>theme 1: harmonic</i> <i>An inverse problem for data-driven prediction in quantum mechanics</i>
10.00 – 10.45	<b>Oana Pocovnicu</b> , Heriot-Watt University <i>theme 2: dispersive</i> <i>Invariant Gibbs dynamics for fractional wave equations in negative Sobolev spaces</i>
10.45 – 11.15	Coffee break
11.15 – 11.45	<b>Pablo Merino</b> , Basque Center for Applied Mathematics

	<i>Early Career Talk</i> <i>Pointwise Convergence of the Klein-Gordon Flow</i>
11.45 – 12.15	<b>Theo Lavier</b> , Heriot-Watt University <i>Early Career Talk</i> <i>Semi-Discrete Optimal Transport Techniques for the Compressible Semi-Geostrophic Equations</i>
12.15 – 13.30	Lunch break
13.30 – 14.00	<b>Hrit Roy</b> , University of Edinburgh <i>Early Career Talk</i> <i>The Bochner--Riesz problem for convex domains</i>
14.00 – 14.30	<b>Andrea Olivo</b> , Basque Center for Applied Mathematics <i>Early Career Talk</i> <i>Sharp embeddings between weighted Paley-Wiener spaces</i>
14.30 – 15.15	<b>3x micro talks</b> (15mins each)
15.15 – 15.45	Coffee break
15.45 – 16.30	<b>Maciej Buze</b> , Heriot-Watt University <i>theme 3: variational</i> <i>Barycenters in unbalanced optimal transport</i>
16.30 – 17.15	<b>Daniel Eceizabarrena</b> , Basque Centre for Applied Mathematics <i>theme 2: dispersive</i> <i>Uniform counterexamples to the convergence problem for periodic dispersive equations with polynomial symbols</i>
19.00 onwards	Workshop Dinner, hosted at Canny Man's <i>237 Morningside Road, Edinburgh EH10 4QU</i>

WEDNESDAY 30 OCTOBER 2024	
09.15 – 10.00	<b>Jonathan Hickman</b> , University of Edinburgh <i>theme 1: harmonic</i> <i>Bounds for a planar Pierce—Yung operator</i>
10.00 – 10.45	<b>Arghir Zarnescu</b> , Basque Center for Applied Mathematics <i>theme 3: variational</i> <i>On a variational approach to Euler and Navier-Stokes</i>
10.45 – 11.15	Coffee break
11.15 – 12.00	<b>Luz Roncal</b> , Basque Center for Applied Mathematics <i>theme 2: dispersive</i> <i>On Rubio de Francia square function</i>
12.00 – 12.45	<b>Lucia Scardia</b> , Heriot-Watt University <i>theme 3: variational</i> <i>Shape Optimisation for nonlocal anisotropic energies</i>
12.45 – 14.00	Lunch break
14.00 – 15.30	Working groups - discussion
15.30 – 16.00	Coffee break
16.00 – 17.00	Concluding session