# Mathematical Methods for the General Relativistic Two-body Problem
## (11 Aug 2025–15 Aug 2025)

| Name & Affiliation | Talk Title |
|---|---|
| Laura Bernard<br>Observatoire de Paris-PSL, France | Analytical Modeling of Gravitational Waves: A Recent View on the post-Newtonian Framework |
| Beatrice Bonga<br>Radboud University, Netherlands | Dynamical Tidal Resonances in EMRIs |
| Alexander Burke<br>University of Glasgow, UK | Next Steps: Addressing the Potential for Systematic and Probabilistic Biases in EMRI Inference |
| Christian Chapman-Bird<br>University of Birmingham, UK | Fast EMRI Waveforms: Fast Waveform Generation for Asymmetric-mass Binaries |
| Geoffrey Compere<br>Université Libre de Bruxelles, Belgium | Hybrid Post-Newtonian/Self-force inspiral and Transition-to-plunge Waveforms |
| Curt Cutler<br>NASA Jet Propulsion Laboratory, USA | Building an Efficient EMRI Search Algorithm |
| Sam Doland<br>The University of Sheffield, UK | Metric Reconstruction on Kerr Spacetime in Lorenz Gauge |
| Lisa Drummond<br>California Institute of Technology, USA | Why Matter Matters: Astrophysical Environments of EMRIs |
| Jonathan Gair<br>Albert Einstein Institute, Germany | The Prospects and Challenges of Science with LISA EMRI Observations |
| Anna Heffernan<br>University of Balearic Islands, Spain | LISA and the LISA Science Team |
| Oliver Long<br>Albert Einstein Institute, Germany | Putting the Hype in Hyperbolic Black Hole Scattering |
| Phillip Lynch<br>Albert Einstein Institute, USA | The DDPC and EMRI Waveform Modelling: Structure, Roles, and Roadmap |
| Rodrigo Panosso Macedo<br>Niels Bohr Institute, Denmark | The Hyperboloidal Framework in Black Hole Perturbation Theory |
| Zachary Nasipak<br>University of Southampton, UK | Computational Advances in Self-force: Building a Bridge between Theory and Waveform Modeling |

| Name & Affiliation | Talk Title |
|---|---|
| Adam Pound<br>University of Southampton, UK | Second-order Self-force: State of Play |
| Andrew Spiers<br>University of Nottingham, UK | Fix the Frame, Resolve the Memory: The Bondi–Sachs Gauge in Black Hole Perturbation Theory |
| Leo Stein<br>The University of Mississippi, USA | Memory and Hybridization for Connecting the Numerical and Analytical Two-body Problem |
| Vojtech Witzany<br>Charles University in Prague, Czech Republic | Integrability of the Relativistic Two-body Problem |
| Huan Yang<br>Tsinghua University, China | Probing Formation Channels of Extreme Mass-ratio Inspirals |