

Session 22, Lorentzian Geometry and Mathematical Relativity

Wednesday 18, Room 303

- 17:30–18:00 **Asymptotically simple space-times**
Helmut Friedrich
- 18:00–18:30 **Gowdy phenomenology in scale free variables**
Lars Andersson
- 18:30–19:00 **Spacelike energy of timelike unit vector fields on a Lorentzian manifold**
Ana Hurtado Cortegana
- 19:00–19:30 **The qualitative behaviour of plane wave type spacetimes**
Miguel Sánchez

Thursday 19, Room 302

- 11:30–12:00 **Conformal deformation of metrics**
José F. Escobar
- 12:00–12:30 **Quasiconvex foliations and asymptotically flat metrics of non-negative scalar curvature**
Gilbert Weinstein
- 12:30–13:00 **Relativistic particles with rigidity and torsion**
Manuel Barros Díaz
- 13:00–13:30 **Geometry and physics of lightlike curves**
Ángel Ferrández Izquierdo
- 15:30–16:00 **Integral formulae for spacelike hypersurfaces in conformally stationary spacetimes and applications**
Antonio Colares
- 16:00–16:30 **On the Penrose inequality for general horizons**
Marc Mars Lloret
- 16:30–17:00 **The Penrose inequality and null hypersurfaces**
Göran Bergqvist
- 17:30–18:00 **AdS/CFT and uniqueness of the AdS soliton spacetime**
Eric Woolgar
- 18:00–18:30 **Black hole non-existence results in spacetimes with a negative cosmological constant**
Sumati Surya

Saturday 21, Room 302

- 08:30–09:00 **The Bochner technique on Lorentzian manifolds**
Alfonso Romero Sarabia
- 09:00–09:30 **Conformal Killing spinors in Lorentzian geometry**
Helga Baum
- 09:30–10:00 **The Bjorling problem in Lorentz-Minkowski spaces**
Pablo Mira Carrillo
- 10:00–10:30 **Symplectic methods and index theory in semi-Riemannian geometry**
Paolo Piccione
- 10:30–11:00 **Recent advances on Osserman manifolds**
Eduardo García Ríó