

Workshop on "Electromagnetic Spacetimes"

Location: WPI Seminar Room C 714 Mon, 19. Nov (Opening: 09:00) - Fri, 23. Nov 12

Organisation(s)
WPI

Organiser(s)
Michael K.-H. Kiessling (Rutgers)
Norbert J. Mauser (WPI c/o U. Wien)

Monday November 19th

09:00 – 10:15 Kurz, Stefan: *A new definition of a coordinate- and frame-free observer in relativistic Electrodynamics*

10:45 – 12:00 Kijowski, Jerzy: *Gravitational energy: the Hamiltonian and quasi-local approach*

14:00 – 15:15 Tahvildar-Zadeh, Shadi: *Integrability and Vesture for Harmonic Maps into Symmetric Spaces, with Applications to General Relativity*

16:00 – 18:00 Topical Discussion: TBA

Tuesday November 20th

09:00 – 10:15 Beig, Robert: *The static 2-body problem in General Relativity*

10:45 – 12:00 Kiessling, Michael: *Electrostatic Maxwell-Born-Infeld fields with point charge sources / Maximal foliations with lightcone defects*

14:00 – 15:15 Perlick, Volker: *On the self-force on point charges in Born-Infeld theory*

16:00 – 18:00 Topical Discussion: TBA

Wednesday November 21st

09:00 – 10:15 Brenier, Yann: *Hidden convexity and linearization in the Born-Infeld model of Electromagnetism*

10:45 – 12:00 Stalker, John: *Scalar waves on the hyper-extreme Reissner-Nordstroem background*

14:00 – 15:15 Perlick, Volker: *On photon accumulation near a black hole*

16:00 – 18:00 Topical Discussion: TBA

Thursday November 22nd

09:00 – 10:15 Itin, Yakov: *Which geometry is predicted by the electromagnetic waves?*

10:45 – 12:00 Favaro, Alberto: *Fresnel versus Kummer surfaces: geometrical optics in dispersionless linear (meta)materials and vacuum*

14:00 – 15:15 Finster, Felix: *Quantum oscillations can prevent the big bang singularity in an Einstein-Dirac cosmology*

16:00 – 18:00 Topical Discussion: TBA

Friday November 23rd

09:00 – 10:15 Chrusciel, Piotr: *Space-time diagrammatics*

10:45 – 12:00 Brill, Dieter: TBA