

Monday May 12

8:50-9:00 Welcome

Pulsars & magnetars

- 9:00-9:35 Spitkovsky "Modeling magnetospheres of pulsars and other electromagnetic beasts."
- 9:35-10:10 Gralla "Spacetime Approach to Force-free Magnetospheres"
- 10:10-10:40 Coffee break
- 10:40-11:15 Beskin "On the anomalous torque acting on the rotating magnetized sphere (Let's start from the very beginning again)"
- 11:15-11:50 Gruzinov "How Pulsars Shine"
- 11:50-12:05 Philippov "Particle-in-cell simulations of pulsar magnetosphere"
- 12:05-1:30 Lunch
- 1:30-2:05 Timokhin "Pulsar as a plasma generator"
- 2:05-2:20 Chen "Particle-in-cell Simulations of Pulsar Polar-cap Discharge"
- 2:20-2:55 Beloborodov "Dissipative and radiative processes in magnetars".
- 2:55-3:30 Coffee break
- 3:30-3:45 Parfrey "Broken force-free electrodynamics, current sheets, and your favourite magnetosphere problems"

Shocks & CRs

- 3:45-4:20 Medvedev "Asymmetric diffusion of Cosmic Rays"
- 4:20-4:35 Caprioli "Particle acceleration at shocks"
- 4:35-4:50 Giannios "Relativistic Pair Beams from TeV Blazars: A Source of Reprocessed GeV Emission rather than IGM Heating"
- 4:50-5:05 Morlino "Effects of mass loading on bow shock nebulae"

BHs & jets

- 5:05-5:40 Contopoulos "The Axisymmetric Black Hole Magnetosphere"

Tuesday May 13

PWNe & Reconnection

- 9:00-9:35 Blandford "The Crab and other Animals: Field Untangling, Electromagnetic Implosion and Particle Acceleration"
- 9:35-10:10 Porth "Modeling Crab Nebula"
- 10:10-10:40 Coffee break
- 10:40-11:15 Arons "Relativistic Reconnection in Pair Plasma: a Model and the Its Uses"
- 11:15-11:50 Sironi "Particle Acceleration in Relativistic Magnetic Reconnection"
- 11:50-12:05 Lyutikov "Explosive X-point reconnection"
- 12:05-1:30 Lunch
- 1:30-2:05 Cerutti, "Relativistic reconnection in axisymmetric pulsar winds".
- 2:05-2:40 Drake "Particle acceleration during reconnection".
- 2:40-2:55 Nalewajko "Radiation flares from relativistic plasmoid reconnection".
- 2:55-3:30 Coffee break
- 3:30-4:05 Uzdensky "Radiative Magnetic Reconnection in Astrophysical Plasmas".
- 4:05-4:40 Zrake "Generation and decay of magnetic fields in relativistic turbulence"
- 4:40-5:15 Metzger "Ionization Break-Out from Millisecond PWNe: Testing the Origin of Superluminous Supernovae"

Wednesday May 14

BHs & jets

- 9:00-9:35 McKinney "Radiating Accretion Disks and Relativistic Jets from Rotating Black Holes"
- 9:35-10:10 Kirk "Relativistic, under-dense outflows".
- 10:10-10:40 Coffee break
- 10:40-11:15 Tchekhovskoy "What sets jet power in black hole accretion systems?"
- 11:15-11:50 MacFadyen "Numerical Simulations of the Dynamics of Relativistic Jets"
- 11:50-12:05 Lyutikov "Electromagnetic hair of astrophysical black holes"

- 12:05-1:30 Lunch
- 1:30-2:05 Gammie "Extended MHD models of low accretion rate black holes"
- 2:05-2:40 Begelman "Unmagnetized Relativistic Jets"
- 2:40-2:55 Komissarov "Stability of relativistic jets"
- 2:55-3:30 Coffee break

Numerical

- 3:30-4:05 Radice "New Approaches to Numerical General Relativistic Hydrodynamics: Methods and Applications"
- 4:05-4:40 Balsara "RMHD with Multidimensional Riemann Solvers – A Pathway to Very High Lorentz Factor Simulations".