

JETS AT ALL SCALES

Buenos Aires, Argentina, September 13-17, 2010

Program

Monday 13

08:00: Registration opens

08:45 – 09:00: Welcome

09:00 – 09:45: Invited review I: The jet/accretion disk coupling (F. Mirabel)

09:45 – 10:30: Invited review II: Accreting X-ray binaries and jets (R. Sunyaev)

10:30 – 11:00: Coffee break

Morning Session: Jets: basic issues and physical processes

11:00 – 11:30: Invited talk 1: Relativistic jets: physics and simulations (J. F. Hawley)

11:30 – 11:50: Contributed talk 1: Waves in Poynting-flux dominated jets (J. G. Kirk)

11:50 – 12:10: Contributed talk 2: Modelling magnetically dominated and radiatively cooling jets (M. Huarte-Espinosa)

12:10 – 12:30: Contributed talk 3: Transformation of the electromagnetic into the plasma energy in Poynting dominated jets (Y. Lyubarski)

12:30 -15:00: Lunch break

Afternoon Session: Accretion processes and outflows

15:00 – 15:30: Invited talk 2: The stability of astrophysical jets (P. Hardee)

15:30 – 16:00: Invited talk 3: Accretion disk winds (D. Proga)

16:00 – 16:20: Contributed talk 4: Investigating the disk-jet coupling in accreting compact objects by studying the “radio quiet” sources (P. Soleri)

16:20 – 17:00: Coffee break

17:00 – 17:20: Contributed talk 5: Fitting along the Fundamental plane: New comparisons of jet physics across the black hole mass scale (S. Markoff)

17:20 – 17:40: Contributed talk 6: Jets at lowest mass accretion rates (D. Maitra)

17:40 – 18:00: Contributed talk 7: Radiatively efficient black holes in the hard state: the case of H1743-322 (M. Coriat)

19:00: Welcome cocktail

Tuesday 14

09:00 – 09:45: Invited review III: Relativistic jets at high energies (A. Levinson)

Morning Session: New observational results on jets at all scales

09:45 – 10:15: Invited talk 1: Broadband observations of jets on different scales (E. Gallo)

10:15 – 10:35: Contributed talk 1: The far-infrared view of the radio galaxy M 87 as seen by the Herschel Space Observatory (M. Baes)

10:35 – 11:15: Coffee break

11:15 – 11:35: Contributed talk 2: Unveiling the nature of extragalactic jets with Chandra observations (F. Massaro).

11:35 – 11:55: Contributed talk 3: The jet in M 87 from EVN observations (G. Giovannini)

11:55 – 12:15: Contributed talk 4: The picture of relativistic jet from Fermi-LAT and multi-band observations of blazar 3C 279 (M. Hayashida)

12:15 -15:00: Lunch break

Afternoon Session: Galactic jets

15:00 – 15:30: Invited talk 2: The Galactic Center jet (H. Falcke)

15:30 – 16:00: Invited talk 3: A magnetohydrodynamical model for the formation of episodic jets (F. Yuan)

16:00 – 16:20: Contributed talk 5: High luminosity jets: Can the GRS 1915+105 plateau be compared to the canonical hard state? (P. Van Oers)

16:20 – 17:00: Coffee break

17:00 – 17:20: Contributed talk 6: The disk/jet connection in the enigmatic microquasar Cygnus X-3 (K. Koljonen)

17:20 – 17:40: Contributed talk 7: The role of jets in black-hole X-ray binaries (N. Kylafis)

17:40 – 18:00: Contributed talk 8: The physics of disk winds, jets, and X-ray variability in GRS 1915+105 (J. Neilsen)

Parallel Educational Program I (in Spanish)

19:30: A.J. Castro-Tirado “GRBs, los fenómenos más energéticos del Universo, y su estudio con instrumentación robótica” (at the Planetarium of the City of Buenos Aires)

Wednesday 15

09:00 – 09:45: Invited review IV: Jets from microquasars (S. Corbel)

Morning Session: Microquasars

09:45 – 10:15: Invited talk 1: Non-thermal processes in microquasars (V. Bosch-Ramon)

10:15 – 10:45: Invited talk 2: Investigating accretion disk - radio jet coupling across the stellar mass scale (J. Miller-Jones)

10:45 – 11:15: Coffee break

11:15 – 11:35: Contributed talk 1: X-ray radiation of the jets and the supercritical accretion disk in SS 433 (S. Fabrika)

11:35 – 12:05: Invited talk 3: Jets from neutron stars (S. Migliari)

12:05 – 12:25: Contributed talk 2: Long-term simulations of extragalactic jets: cavities and feedback (M. Perucho-Pla)

12:25 – 12:45: Contributed talk 3: GRS 1915+105 celebrates its majority (1992-2010) (A. Castro-Tirado)

12:45 -15:00: Lunch break

Free Afternoon for Social Activities

Parallel Educational Program II (in Spanish)

19:30: I.F. Mirabel “Agujeros negros y los albores del Universo” (at the Planetarium of the City of Buenos Aires)

Thursday 16

09:00 – 09:45: Invited review V: The formation of relativistic jets (D. Meier)

Morning Session: Jet formation mechanisms

09:45– 10:15: Invited talk 1: General relativistic plasmas around black holes (S. Koide)

10:15– 10:35: Contributed talk 1: Brown dwarfs jets: testing the universality of jet launching mechanisms at the lowest masses (E. Whelan)

10:35 – 11:15: Coffee break

11:15 – 11:45: Invited talk 2: Suzaku studies of microquasars (Y. Ueda)

11:45 – 12:05: Contributed talk 2: Particle acceleration and heating by magnetic reconnection in accretion disk / jet systems: Numerical simulations (E. M. Gouveia Dal Pino)

12:05 – 12:25: Contributed talk 3: Connections between jet formation and multiwavelength spectral evolution in black hole transients (E. Kalemci)

12:25 – 12:45: Contributed talk 4: Jet launching and field advection in disks (J. Ferreira)

12:45 -15:00: Lunch break

Afternoon Session: Jets from protostars

15:00 – 15:30: Invited talk 3: Radio observations of jets from massive young stars (L.F. Rodríguez)

15:30 – 16:00: Invited talk 4: Jet-driven molecular outflows (S. Cabrit)

16:00– 16:30: Invited talk 5: Formation of protostellar jets (C. Fendt)

16:30 – 17:00: Coffee break

17:00 – 17:20: Contributed talk 5: On the three-dimensional structure of HH jets (F. De Colle)

17:20 – 17:40: Contributed talk 6: Origin of jets from young stars: high-angular resolution observations (C. Dougados)

Conference Dinner

20:00 h: Conference Banquet with Tango Show (voucher required).

Friday 17

09:00 – 09:45: Invited review VI: Blazar jet physics in the age of Fermi (C.D. Dermer)

Morning Session: AGN's Jets

09:45 – 10:15: Invited talk 1: Hadronic jet models today (M. Sikora)

10:15 – 10:35: Contributed talk 1: Radiation from matter entrainment in astrophysical jets (A. Araudo)

10:35 – 11:15: Coffee break

11:15 – 11:35: Contributed talk 2: Variability studies in blazar jets with SF analysis: caveats and problems (D. Emmanoulopoulos)

11:35 – 11:55: Contributed talk 3: Jet-disk connection in OJ 287 (M. J. Valtonen)

11:55 – 12:15: Contributed talk 4: Time-dependent multi-zone radiation transfer modeling of fast blazar variability (G. Fossati)

12:15 – 12:35: Contributed talk 5: The influence of collimation on the appearance of relativistic jets (P.O. Petrucci)

12:35 -15:00: Lunch break

Afternoon Session: GRB's jets

15:00 – 15:30: Invited talk 2: GRBs: Recent theoretical progress (T. Piran)

15:30 – 16:00: Invited talk 3: GRBs: Phenomenology (G. Ghisellini)

16:00 – 16:20: Contributed talk 6: Afterglow light curves from magnetized GRB flows (P. Mimica)

16:20 – 17:00: Coffee break

17:00 – 17:20: Contributed talk 7: GRB spectral-energy correlations: facts and misconceptions (G. Ghirlanda)

17:20 – 17:40: Contributed talk 8: Instabilities in the GRB central engine. What makes the jet variable? (A. Janiuk)

17:40 – 18:00: Contributed talk 9: Simulation of relativistic shocks and associated radiation from turbulent magnetic fields (K -I. Nishikawa)

18:00 – 18:30: Summary (Sambruna / Paredes / Romero)

18:30: Farewell

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