



Final Program

Monday, 2009 August 3rd

- 11:00 - 11:08 Opening

Quasi-periodic Oscillations from mHz to kHz, X-ray bursts and superbursts

- 11:08 - 11:33 Quasi-Periodic Oscillations (*M. Méndez, Invited*)
- 11:33 - 11:58 Recent developments in the study of accreting millisecond X-ray pulsars (*R. Wijnands, Invited*)
- 11:58 - 12:18 Accretion states of neutron stars: luminosity, variability and spectra (*M. Linares*)
- 12:18 - 12:30 Review on kHz QPO and spin relations of LMXBs (*C.M. Zhang*)

X-ray bursts and superbursts. Accreting millisecond X-ray pulsars

- 14:00 - 14:25 γ -ray emission from pulsar/massive-star binaries (*G. Romero, Invited*)
- 14:25 - 14:45 X-ray burst ignition and profiles (*R. Cooper, Solicited*)
- 14:45 - 14:57 Boundary layer emission in luminous LMXBs (*M. Gilfanov*)
- 14:57 - 15:09 Discovery of a relativistically broadened iron line in the spectrum of the millisecond pulsar SAX J1808.4-3658 (*Di Salvo*)
- 15:09 - 15:21 Timing of the 2008 Outburst of SAX J1808.4-3658 with XMM-Newton: A Stable Orbital Period Derivative over Ten Years (*L. Burderi*)
- 15:21 - 15:33 Nearly aligned magnetic fields and wandering emission regions in accreting millisecond pulsars (*S. Boutloukos*)

AXP/SGR and magnetars, very-high energy emission

- 16:00 - 16:25 Magnetar Observations in the Fermi Era (*C. Kouveliotou, Invited*)
- 16:25 - 16:45 Timing Nearby, Thermally Emitting, Isolated Neutron Stars (*D.Kaplan, Solicited*)
- 16:45 - 17:03 Poster presentations
- 17:03 - 17:30 General discussion



Tuesday, 2009 August 4th

Magnetars, isolated neutron stars

- 11:00 - 11:25 Probing Fundamental Physics with Radio Pulsars (*D. Lorimer*, *Invited*)
- 11:25 - 11:45 PSR J0737-3039A/B: Six Years of Seeing Double (*R. Breton*, *Solicited*)
- 11:45 - 12:05 Pulsar results with the Fermi Large-Area Telescope (*P. Ray*, *Solicited*)
- 12:05 - 12:17 Intermittent pulsars: new results and implications for pulsar spin down (*M. Kramer*)
- 12:17 - 12:29 Magnetic equilibria and their evolution in isolated neutron stars (*A. Reisenegger*)

Wednesday, 2009 August 5th

Various

- 11:00 - 11:12 Magnetic explosions: magnetars, solar flares and magnetospheric substorms (*D.B. Melrose*)
- 11:12 - 11:24 Fast X-ray/Optical cross correlations for X-ray binaries: trends between objects and epochs (*M. Durant*)
- 11:24 - 11:36 Magnetar QPO's (*M. van Hoven*)
- 11:36 - 11:48 The prediction of Type-I X-ray bursts as a method to constrain the equation of state of neutron stars (*D. Altamirano*)
- 11:48 - 12:00 A Radio Pulsar/X-ray Binary Missing Link (*J. van Leeuwen*)
- 12:00 - 12:30 General discussion

Gravitational waves. Various

- 14:00 - 14:25 Gravitational waves from neutron stars (*N. Andersson*, *Invited*)
- 14:25 - 14:37 Gravitational-wave detection using pulsar timing arrays (*R. van Haasteren*)
- 14:37 - 14:49 Constraining pulsar gap models with the lightcurve and flux properties of the gamma-ray pulsar population (*I. Grenier*)
- 14:49 - 15:01 Long-term timing of rotating radio transient J1819-1458 (*A. Esamdin*)
- 15:01 - 15:13 Resonant Compton Upscattering in High Field Pulsars and Magnetars (*P.L. Gonthier*)
- 15:13 - 15:25 Galactic Neutron Star Populations (*K. Belczynski*)



Future instrumentation for timing

- 16:00 - 16:20 The Advanced X-ray Timing Array (AXTAR) (*P. Ray*, [Solicited](#))
- 16:20 - 16:40 ASTROSAT as a timing instrument (*D. Bhattacharya*, [Solicited](#))
- 16:40 - 17:00 The High Time Resolution Spectrometer on the International X-ray Observatory (*D. Barret*, [Solicited](#))
- 17:00 - 17:30 General discussion

Posters

- *E. Abdikamalov* - The Plasma Magnetosphere of Oscillating Neutron Stars in General Relativity
- *B. Ahmedov* - Plasma Magnetosphere Formation Around Oscillating Magnetized Neutron Stars
- *T. Akgün* - Stability of Magnetic Fields
- *M.A. Albarracin* - Combustion of hadronic matter into quark matter inside neutron stars
- *M. Bagchi* - Effect of stellar interactions on orbital parameters of binary radio pulsars in globular clusters
- *P. Bakala* - Mass and angular momentum estimates based on twin peak QPO models
- *S. Balman* - The Broad-band Noise Characteristics of Selected Anomalous X-Ray Pulsars and Soft Gamma-ray Repeaters
- *S. Balman* - Frequency Resolved Spectroscopy of Selected Dipping Low-Mass X-ray Binaries
- *Yu.V. Barkin* - Possible mechanism of inversion cyclic activity and glitches of pulsars
- *R. Baruah* - Rapid neutron capture process in high entropy environment in explosion of supernova type II and formation of neutron stars
- *C.G. Bernal* - Submergence and rediffusion of Bfield in NS surfaces
- *F. Bernardini* - From outburst to quiescence: the decay of the transient AXP XTE J1810-197
- *G.S. Bisnovatyi-Kogan* - Activity of the non-equilibrium layer in a neutron star crust
- *V. Bobylev* - Open cluster ASC21 as probable birth place of neutron star Geminga
- *S. Bogdanov* - Constraining Neutron Star Structure with X-ray Timing of Radio Millisecond Pulsars
- *S.J. Buchner* - Vela Glitch Monitoring using the XDM
- *A. Carramiñana* - Mapping the high energy environment of neutron stars with HAWC
- *H.-K. Chang* - The Nuclear Compton Telescope (NCT) project
- *A. E. Chukwude* - 20 Years of Rotational History of the Pulsar B0959-54
- *J.G. Coelho* - Quark Matter in compact stars using NJL model with vector couplings
- *G. Ding* - Spectral Evolution along the Tracks on the Hardness-Intensity Diagrams in 3-220 keV in XTE J1701-462
- *K. Duorah* - Production of Gamma-ray bursts in Magnetized Neutron stars
- *M. Durant* - An accretion disc temperature profile: phase-resolved ULTRASPEC observations of the pulsar 4U 1822-371
- *N. Falcon* - Heat Waves and Cooling Theory of Neutron Stars
- *C. Germanà* - Fast X-ray temporal variability and tidal fields around compact objects
- *U.R.M.E. Geppert* - Hall Drift in Neutron Star Crust - Implications for the Pulsar Inner Accelerator



- *J.A. Gil* - Partially Screened Gap Model in Pulsars
- *A. Karastergiou* - Radio polarization measurements from the Rotating Radio Transient (RRAT) J1819-1458
- *V. Kauts* - Dark matter halo around a neutron star
- *J. Kijak* - Maximum energy above 1 GHz in pulsar spectra and radio spectra of AXP sources
- *A. Kotrlová* - Quasiperiodic oscillations in a strong gravitational field around neutron stars testing braneworld models
- *T.I. Larchenkova* - The precise timing of millisecond pulsars as a possible method of the study of globular clusters and Galaxy structures
- *J. van Leeuwen* - Radio pulsars with LOFAR
- *C.H. Lenzi* - Determination of the neutron star mass-radii relation using narrow-band gravitational wave detector
- *X. Liu* - On the formation of the eccentric binary and millisecond pulsar PSR J1903+03273
- *D.R. Lorimer* - Pulsar Parallaxes and the Lutz-Kelker Bias
- *Q. Luo* - Radiation in the closed field line regions of pulsar magnetospheres
- *Y.-Q. Lou* - Origin of Intensely Magnetized Neutron Stars
- *A. Lutovinov* - Recent results of timing analysis of X-ray pulsars in hard X-rays
- *M. Malheiro* - Color Superconductivity and Confinement in the Chromodielectric Model
- *V. Malofeev* - Radio emission from two AXPs at low frequencies
- *S. Martins de Carvalho* - Compressibility of two nuclear scenarios
- *M.V. McSwain* - The Gamma-ray Binaries LS 5039 and LS I+61 303 in the Fermi Era
- *E. Meheut* - kHz QPO in neutron star binaries: a new approach
- *G.I. Melikidze* - Pulsars and Magnetars: Are They so Different?
- *D.P. Menezes* - The NJL model description of quark matter under strong magnetic fields
- *O. Miranda* - Gravitational Waves from Neutron Stars
- *V. Morozova* - Effect of Gravitomagnetic Charge on Pulsar Magnetospheric Structure and Particle Acceleration in a Polar Cap
- *Q. Peng* - Origin of Magnetars and their activity
- *S. Petrova* - Physics of the radio - high-energy connection in pulsars
- *S. Petrova* - Radio emission pattern of the Crab pulsar
- *S. Petrova* - Physics of pulsar radio emission beyond the low-frequency turnover
- *C. Petrovich* - Rotochemical heating with Cooper pairing
- *J. Poutanen* - Receding disc causing pulse profile variations and timing noise in accreting millisecond pulsars
- *M.S.E. Roberts* - A Multi-Wavelength View of Some of the New Gamma-Ray Pulsars
- *B.P. Sarmah* - Gravitational wave production from r-mode instability of neutron stars in presence of magnetic field and differential rotation



- *P. Savolainen* - Long-term INTEGRAL observations of bright and persistent neutron star Low-Mass X-ray Binaries
- *R. Sood* - The Physical Environment of 2S 0114+650
- *W. Tian* - Distances to Two Pairs of PSR/SNR/TeV Source Systems
- *G. Török* - Relations between the two kHz QPOs in atoll and Z sources
- *C.O. Vasquez Flores* - Radial oscillations of color superconducting strange stars
- *R. Walter* - Exceptional flaring activity of the anomalous X-ray pulsar 1E 1547.0-5408
- *J. Wang* - Neutron star magnetic field and accretion crust structure
- *W. Wang* - A peculiar hard X-ray burst in high mass X-ray binary 4U 2206+54
- *W. Wang* - Evidence for a strongly magnetized neutron star in 4U 2206+54 with INTEGRAL/IBIS observations
- *H. Yin* - Neutron star magnetic field and accretion screen
- *C.M. Zhang* - On the 3:2 ratio of twin QPOs from neutron star to black holes
- *J. Ziolkowski* - How massive could the progenitors of magnetars be?