

ZELDOVICH-100 CONFERENCE

IKI, MOSCOW, JUNE 16-20, 2014

PARALLEL SECTIONS PROGRAM

Section 2: HIGH ENERGY ASTROPHYSICS

Wednesday, JUNE 18

Theory of Accretion

- 9:30-9:50 Abramovicz, Marek
Transonic accretion onto a black hole
- 9:50-10:10 Chakrabarti, Sandip
Complete Solution of Black Hole Accretion: Theory, Numerical simulation and extraction of flow parameters from XSPEC fitting
- 10:10-10:30 Inogamov, Nail
Accretion of rotating gas through Bondi radius onto a supermassive black hole
- 10:30-10:50 Rafikov, Roman
Between the Disk and the Star: New Ideas on the Boundary Layers of Accretion Disks
- 10:50-11:10 Shakura, Nikolai
Quasi-spherical Wind Accretion onto magnetized neutron stars and nature of SFXTs
- 11:10-11:40 Coffee break**
- 11:40-12:00 Veledina, Alexandra
Striking optical variability in X-ray binaries as a probe of accretion picture

Physical processes

- 12:00-12:20 Bogovalov, Sergey
Magnetocentrifugal acceleration of plasma in the pulsar magnetosphere
- 12:20-12:40 Kocharovsky, Vladimir
Relativistic effects and cyclotron line formation in

magnetized atmospheres of compact stars

12:40-13:00 Vereshchagin, Gregory (TBC)
Photospheric emission from relativistic outflows

Compact objects

13:00-13:20 Levin, Yuri
Magnetar activity

13:20-15:00 LUNCH and poster session

15:00-15:20 Poutanen, Juri
Advances in X-ray burst modelling

15:20-15:40 Revnivtsev, Mikhail
Emission of neutron stars as a tool to measure matter
properties at supernuclear densities

15:40-16:00 Titarchuk, Lev
Observational signatures of a black hole and neutron star

Populations of X-ray binaries in galaxies

16:00-16:20 Fabrika, Sergei
Ultraluminous X-ray Sources

16:20-16:40 Lutovinov, Alexander
High-Mass X-ray Binaries in hard X- rays

16:40-17:10 Coffee break

17:10-17:30 Popov, Sergei
Initial parameters and evolution of neutron stars

17:30-17:50 Postnov, Konstantin
X-ray sources in elliptical galaxies: formation and evolution

AGN

- 17:50-18:10 Sazonov, Sergey
The true fraction of obscured AGN and its dependence on luminosity
- 18:10-18:30 Stern, Boris
Fermi observations of blazars, constraints on the location of the gamma-ray emission region

Thursday, JUNE 19

Observations

- 12:00-12:20 Moskalkenko, Igor
Gamma-ray sky: Fermi spacecraft results
- 12:20-12:40 Cherepashchuk, Anatoly
INTEGRAL observations of supercritically accreting
microquasar SS433
- 12:40-13:00 Gnedin, Yuri Nickolaevich
Magnetic Fields of Accreting Black Holes in Active Galactic
Nuclei with High Energy Gamma-Ray Radiation
- 13:00-13:20 Paerels, Frits
Photospheric Spectroscopy of Hot Neutron Stars in the Fe
Lyman Band

13:20-15:00 LUNCH and poster session

- 15:00-15:20 Su, Meng
Fermi Bubbles through eROSITA's Eye and the Implications to Recent
Accretion Events of the Galactic Supermassive Black Hole

Type Ia supernovae

- 15:20-15:40 Chechetkin, Valeri
Mechanism of supernova explosion
- 15:40-16:00 Dong, Subo
Head-on collisions of white dwarfs in triple systems explain
type Ia supernovae
- 16:00-16:20 Grebenev, Sergey
Supernova radioactivity from X- and gamma-ray observations
- 16:20-16:40 Shchekinov, Yuri
Ignition and launching the galactic wind by multiple SNe explosions

16:40-17:10 Coffee break

Magnetic fields

- 17:10-17:30 Buechner, Joerg
About a subgrid scale approach to turbulent dynamo and reconnection.
- 17:30-17:50 Pogosian Levon
Primordial magnetism in CMB
- 17:50-18:10 Rudnick, Lawrence
Diffuse Non-thermal/Thermal Interactions: an observer's view
- 18:10-18:30 Shukurov Anvar
Turbulence and magnetic fields in galaxy clusters
- 18:30-18:50 Sokoloff, Dmitry
Magnetic fields of galaxies and uniform cosmological magnetic field