FIRST ANNOUNCEMENT

Second Conference on the Science with eROSITA and ART-XC aboard Spectrum-RG "X-ray sky: from stars and black holes to cosmology"



Kazan, 3-7 September, 2012

WWW: http://hea.iki.rssi.ru/kazan2012/ E-MAIL: kazan2012 at iki.rssi.ru

Organizers: Space Research Institute (IKI), Kazan Federal University (KFU) and Academy of

Sciences of the Republic of Tatarstan (ANT)

SCIENTIFIC RATIONALE

The Spectrum-Roentgen-Gamma (Spectrum-RG) observatory is planned to be launched in 2013 into an L2 orbit. Over the first 4 years, its X-ray telescopes eROSITA and ART-XC will survey the whole sky with a record sensitivity in the 0.5-10 keV energy band. It is expected that the survey will discover practically all massive clusters of galaxies in the observable Universe and provide a uniquely rich database for studying the large scale structure of the Universe, testing cosmological models and constraining the nature of dark energy. The survey should also discover several millions of active galactic nuclei with which it will be possible to trace the history of growth of supermassive black holes in evolving galaxies. There also will be extensive observations of essentially all classes of Galactic X-ray sources, such as active stars, cataclysmic variables and X-ray binaries, as well as on hot diffuse interstellar and intergalactic media.

The goal of the second international Spectrum-RG conference is to discuss the different scientific topics addressed by the mission, synergies with surveys at other wavelengths, and requirements to follow-up observations. Contributed talks and poster presentations are invited on the topics related to the SRG science goals.

We plan to have introductory talks on the proposed flight scheme to L2 and the status of the spacecraft and its instruments, and a number of scientific sessions:

- * Galaxy clusters and cosmology
 - Physical properties of clusters and groups of galaxies
 - Large scale structure of the Universe
 - Evolution of the cluster mass function and other cosmological tests

- * Active galactic nuclei
 - Evolution and properties of the AGN population
 - Quasars at high redshift
 - AGN as tracers of large scale structure
- * Galactic compact objects and stars
 - Cataclysmic variables and X-ray binaries
 - Isolated neutron stars
 - Active stars
 - X-ray sources in nearby galaxies
- * Gamma-ray bursts and afterglows
- * Diffuse X-ray emission
 - Cosmic X-ray background and its fluctuations
 - Galactic Ridge X-ray Emission
 - Hot ISM in the Milky Way, LMC and SMC
 - Supernova remnants
- * X-ray emission from planets and comets
- * Multi-wavelength synergies
 - Cosmic microwave background/Sunyaev-Zeldovich surveys
 - Wide-area optical, infrared and radio surveys
- * Planned X-ray missions

VENUE

The conference will take place at the Academy of Sciences of the Republic of Tatarstan, Kazan, Russia.

Kazan is a large (over 1 million people) city on the Volga river, the capital of the Republic of Tatarstan, located about 800 km east of Moscow. It has historically been a meeting point of European and Asian cultures, Christianity and Islam. The city celebrated its thousand-year anniversary in 2005. With its unique historical monuments, Kazan is included into the UNESCO World Heritage Cities list.

http://en.wikipedia.org/wiki/Kazan

SCHEDULE

There will be an opening ceremony, chamber concert and reception at the Kazan Federal University on Monday afternoon, September 3rd. The scientific sessions will begin on the morning of Tuesday, September 4th, and will last until the evening of Friday, September 7th.

One afternoon during the conference is planned to be free, to have an organized tour of the Kazan Kremlin followed by the conference dinner. There are also plans to organize a boat trip on the Volga or an excursion around Kazan after the conference, on Saturday, September 8th.

REGISTRATION, FEES and VISA SUPPORT

To create a good working atmosphere during the conference, participation will be limited to about 150 people. The registration fee is 12,000 rubles (approximataly 300 euros). The fee includes the costs of the opening reception, coffee/tee and refreshments during breaks, one excursion during the conference, and the conference dinner. There is a fee of 5000 Rubles for accompanying persons,

which covers the opening reception, one excursion during the conference, and the conference dinner.

Citizens from many countries need a visa to enter the Russian Federation. The LOC will provide invitation letters

Further details on the registration procedure, fee payment and visa support will be provided at the conference site.

IMPORTANT DATES

- * February 25, 2012: Call for abstracts and opening of registration
- * June 30, 2012: Deadline for abstract submission and registration
- * August 5, 2012: Final program release
- * August 15, 2012: Fee payment deadline
- * September 3-7, 2012: Conference

TRAVEL and ACCOMMODATION

There are Lufthansa flights from Frankfurt to Kazan and Aeroflot and S7 flights via Moscow. Kazan is also reachable by train from Moscow.

Further information on travel and accommodation will be posted at the conference site.

ORGANIZING COMMITTEES

SOC:

- Yu. Balega (SAO, Nizhny Arkhyz)
- I. Bikmaev (KFU, Kazan)
- A. Cherepashchuk (MSU, Moscow)
- E. Churazov (IKI, MPA)
- T. De Zeeuw (ESO)
- W. Forman (Harvard, CfA)
- M. Gilfanov (IKI, MPA)
- K. Nandra (MPE, Garching)
- M. Pavlinsky (IKI)
- P. Predehl (MPE, Garching)
- N. Sakhibullin (KFU, Kazan)
- S. Sazonov (IKI), Deputy chair
- R. Sunvaev (IKI, MPA), Chair
- D. Varshalovich (Ioffe FTI, St. Petersburg)
- A. Vikhlinin (IKI, CfA)

Organizing Committee:

Co-chairs - I. Gafurov (Rector of the Kazan Federal University),

A. Mazgarov (President of the Academy of Sciences of the Republic of Tatarstan)

Deputy chair: N. Sakhibullin (KFU)

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