

Status of RSDC

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RSDC

- Supports the archive of all publicly available + Russian PI data
- Has the current OSA + Russian INTEGRAL software installed
- Is used by [IKI](#) scientists, scientists from [Sternberg Astronomical Institute](#) ([Moscow University](#)), [Kazan University](#), [Ioffe Institute](#), [Pulkovo Observatory](#), [Lebedev Physical Institute](#), [Moscow Engineering Physics](#) and [Moscow Technical Physics Institutes](#)
- Uses Russian optical telescopes for identificaton (and study) of new IGR sources ([RTT-150](#) at Turkey, [6-m telescope](#) at Nizhnii Arkhyz, [AZT33IK](#) at Sayans/Monds)
- Is a subdivision of the High Energy Astrophysics Department of IKI. The Department is responsible for the data analysis of the Spectrum-X mission, thus the RSDC scientists are involved also in the Spectrum-X mission

Monitoring of X-ray Transients (2021-23)

- New X-ray transient **IGR J17533-2928** discovered by INTEGRAL (Grebenev, Mereminskiy) ATel 14425 (2021)
- INTEGRAL/JEM-X observes the new outburst of the eclipsing 518 Hz AMXP SWIFT **J1749.4-2807** (Mereminskiy, Grebenev, Lutovinov, Krivonos, Kuulkers) ATel 14427 (2021)
- 4U 1730-22 (CXOU J173357.5-220156) was detected in outburst by INTEGRAL for the first time since 1972 (Grebenev) ATel 14870 (2021)
- INTEGRAL follow-up of the 4U 1730-22 outburst (Ferrigno, Savchenko, Bozzo, Grebenev, Wilms, Ducci, Kuulkers) ATel 14896 (2021)
- Reactivation of **IGR J17091-3624** in hard X-rays visible with INTEGRAL (Grebenev, Krivonos), ATel 15283 (2022)
- X-ray activity of the transient burster **IGR J17498-2921** detected with INTEGRAL (Grebenev, Bryksin, Sunyaev) Atel 15996 (2023)
- Many GCNs 30304, 30444, 30452, 30631, 31081, 31230, 31566, 32105, 32819

Russian Publications (2022-23)

- **Sgr B2 hard X-ray emission with INTEGRAL after 2009: still detectable?**
(Kuznetsova, Krivonos, Lutovinov, Clavel) **MNRAS**, 509, 1605-1613 (2022)
- **INTEGRAL/IBIS 17-yr hard X-ray all-sky survey**
(Krivonos, Sazonov, Kuznetsova, Lutovinov, Mereminskiy, Tsygankov)
• **MNRAS**, 510, 4796-4807 (2022) (929 objects)
- **Parameterization of long-period eclipsing binaries**
(Pakhomova, Berdnikov, Kniazev, Katkov, Malkov)
Open Astronomy, 31, 106-109 (2022)
- **Peculiar X-ray transient SRGA J043520.9+552226/AT2019wey discovered with SRG/ART-XC**
(Mereminskiy, Dodin, et al.)
Astron. Astrophys., 661, A32 (2022)
- **A search for nonthermal X-ray emission in the cluster of galaxies Ophiuchus**
(Krivonos)
Astronomy Letters, 48, 636-643 (2022)

Russian Publications (2022-23)

- **Search for AGNs in Dwarf Galaxies in the M81 Field with INTEGRAL Data**
(Mereminskiy, Sazonov, Krivonos, Karachentsev)
Astronomy Letters 49, 1-8 (2023)
 - **RX J0440.9+4431: another supercritical X-ray pulsar**
(Salganik, Tsygankov, Doroshenko, Molkov, Lutovinov, Mushtukov, Poutanen)
MNRAS, in press [astro-ph:2304.14881] (2023)
 - **Chromatic afterglow of the gamma-ray burst GRB 200829A**
(Pankov, Pozanenko, Minaev, Belkin, et al.)
Astronomy Letters, 49, #3, in press (2023)
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- **INTEGRAL observatory: 20 years of observations and discoveries**
(Grebenev, Sunyaev)
The Earth and the Universe #6, p.49-64 (2022)