New Swift/XRT observations confirm that the active Galactic center transient is AX J1745.6-2901

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New Swift/XRT observations confirm that the active Galactic center transient is AX J1745.6-2901

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Subjects: X-ray, Binary, Neutron Star, Transient

Referred to by ATel #: 5246, 5332, 5847

Ongoing Swift/XRT monitoring observations of the Galactic center have allowed us to refine the position of the X-ray transient that is currently active (ATel #5222). Utilizing the position-enhancement algorithm described by Goad et al. (2007) and Evans et al. (2009), we find:

R.A. (J2000) = 17:45:35.64
Dec. (J2000) = -29:01:35.9

with an uncertainty of 2.2" (90% confidence). These coordinates are 1.8" from the Chandra counterpart of AX J1745.6-2901 (CXOGC J174535.6-290133; ATel #1513), hence fully consistent. This confirms that the thermonuclear burster and eclipsing neutron star low-mass X-ray binary AX J1745.6-2901 has entered a new accretion outburst.

The Swift/XRT Monitoring Campaign Website can be found at: http://www.swift-sgra.com

References:
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- On-going radio observations of PSR J1745-2900 at Effelsberg, Nancay, and Jodrell Bank: flux density estimates, polarisation properties, spin-down measurement, and the highest dispersion measure measured.
- Spin-down Measurement of PSR J1745-2900: a New Magnetar
- Further radio pulsations from the direction of the NuSTAR 3.76-second X-ray pulsar, and a dispersion measure estimate.
- MAXI/GSC detection of an X-ray outburst probably from SAX J1747.0-2853 and Swift followup observation of the Galactic center region.
- Detection of radio pulsations from the direction of the NuSTAR 3.76 second X-ray pulsar at 8.35 GHz.
- Swift-BAT monitoring for additional bursts from SGR J1745-29 (Trigger 554491)
- Detection of radio pulsations from the direction of the Galactic center Soft Gamma-ray Repeater with Parkes and the GBT.
- Searches for Dispersed Radio Pulsar Emission from the Sag A* SGR
- Chandra localization of the soft gamma repeater in the Galactic Center region.
- Searches for radio pulsations from the 3.76 second NuSTAR X-ray pulsar in the Galactic centre.
- Limits on Radio Frequency Flux Density Changes in Sgr A*
- NuSTAR discovery of a 3.76 second pulsar in the Sgr A* region.
- Continued Swift Monitoring of the Galactic Center Flare.
- Brightening of Sgr A* at 32 GHz from VLA observations.
- Possible brightening at 22 GHz of Sgr A*.
- Swift XRT spectrum of transient X-ray source at Sgr A**s position.
- Swift/BAT detection of an SGR-like flare from near Sgr A*.
- Ongoing X-ray activity from Sgr A*.
- Large Flare from Sgr A* Detected by Swift.
- Swift detects a flare from IGR J16418-4532.
- INTEGRAL/JEM-X detects a new outburst of the Rapid Burster (MXB 1730-335).
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