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Swift/XRT detection of the very faint X-ray binary transient IGR J17285-2922

ATel #12651; *M. Armas Padilla (IAC-Tenerife), J. van den Eijnden, N. Degenaar and R. Wijnands (UvA)*

on 11 Apr 2019; 16:28 UT

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Subjects: X-ray, Black Hole, Neutron Star, Transient

Referred to by ATel #: [12669](#)

Following the recent detection with INTEGRAL/IBIS-ISCR1 of the very faint X-ray binary IGR J17285-2922 (ATel #12646), we report on a ~ 1 ks Swift/XRT observation taken on April 10th 2019. The source is clearly detected with a net count rate of 1.11 ± 0.04 counts/s (Window Timing mode), confirming the outburst activity.

The source spectrum is well described by a power-law model with a photon index of 1.4 ± 0.2 . It is affected by absorption with an equivalent hydrogen column of $0.6 \pm 0.2 \times 10^{22} \text{ cm}^{-2}$, in agreement with the value reported for the previous 2010 outburst (Sidoli et al. 2011, MNRAS, 415, 2373). The resulting unabsorbed X-ray flux (0.3-10 keV) is $\sim (2.2 \pm 0.1) \times 10^{-10} \text{ erg cm}^{-2} \text{ s}^{-1}$, which corresponds to an X-ray luminosity of $1.7 \times 10^{36} \text{ erg s}^{-1}$, assuming a distance of 8 kpc. The source is 3 times fainter with respect to the peak flux of the 2010 outburst, when the 0.3-10 keV unabsorbed X-ray flux was $\sim (6.1 \pm 0.1) \times 10^{-10} \text{ erg cm}^{-2} \text{ s}^{-1}$ (ATel #2824).

We are grateful to the Swift team for their fast and efficient response to our ToO request. Continued Swift X-ray and VLA radio monitoring of the outburst is planned. Additional multi-wavelength monitoring is encouraged.

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