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

Armas Padilla, M.; van den Eijnden, J.; Degenaar, N.; Wijnands, R.

Published in:
The astronomer's telegram

Link to publication

Creative Commons License (see https://creativecommons.org/use-remix/cc-licenses):
Unspecified

Citation for published version (APA):
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

Credential Certification:Montserrat Armas Padilla (m.armaspadilla@gmail.com)

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

Referred to by ATel #: 12669

Following the recent detection with INTEGRAL/IBIS-ISCRI 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+/-0.2 x10 ^22 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 ~ (2.2+/- 0.1)) x10 ^-10 erg cm^-2 s^-1, which corresponds to an X-ray luminosity of 1.7 x10 ^36 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 ~ (6.1+/- 0.1)) x10 ^-10 erg cm^-2 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.

http://www.astronomerstelegram.org/?read=12651[2-4-2020 16:54:16]
ATel #12651: Swift/XRT detection of the very faint X-ray binary transient IGR J17285-2922

R. E. Rutledge, Editor-in-Chief
Derek Fox, Editor
Mansi M. Kasliwal, Co-Editor

rrutledge@astronomersteam.com
dfox@astronomersteam.com
mansi@astronomersteam.com