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The puzzling X-ray source in RCW 103

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1E 161348-5055 (1E 1613), the source at the center of the supernova remnant RCW103, has defied any easy classification since its discovery, owing to its long-term variability from months to years and a periodicity of 6.67 hr with a variable light curve profile across different flux levels. On June 2016, 1E 1613 emitted a magnetar-like millisecond burst of hard X-rays, accompanied with a factor ~ 100 brightening in the persistent soft X-ray emission. The duration and spectral decomposition of the burst, the discovery of a hard X-ray tail in the spectrum, and the long-term outburst history (from 1999 to 2016 July) suggest that 1E 1613 is an isolated magnetar and the periodicity of 6.67 hr is the rotational spin period, making 1E 1613 the slowest magnetar ever. During this talk I will review the properties of this source, focusing on the last outburst and the mechanism required to slow it down till a such long period.

Primary author: BORGHESE, Alice (INAF/Astronomical Observatory of Rome)

Presenter: BORGHESE, Alice (INAF/Astronomical Observatory of Rome)

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