Département d'Astrophysique

Séminaires du DAp

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Bat 709, salle 3 (salle Cassini, Rdc), CEA Saclay, Orme des Merisiers

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The new symbiotic low mass X-ray binary system 4U 1954+319

High energy observations are revealing a broad variety of binary systems hosting a compact remnant. We will present the results of INTEGRAL, Swift, BeppoSAX, and RXTE/ASM data analysis of 4U1954+319, a source whose nature was unclear since its discovery by the Uhuru satellite, 25 years ago. The highly absorbed spectrum and the timing characteristics point towards a binary system in which a neutron star accretes matter from the stellar wind of its companion, an M-type giant star. Thus 4U1954+319 is the second confirmed member of the emerging class dubbed "symbiotic low-mass X-ray binaries" to host a neutron star. With a spin period of about 5 hours, 4U1954+319 is the slowest accretion-powered X-ray pulsar. We will consider this feature in the framework of standard binary pulsar evolutionary models.

Le séminaire sera donné en français

