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A census of compact objects in Galactic X-ray binaries

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X-ray binaries are stellar systems that undergo mass transfer between a normal star and a compact object. They are ideal candidates to be the progenitors of double compact binaries that end up merging in a burst of gravitational waves. Evolutionary mechanisms such a supernova events or the common envelope phase have a crucial impact on the likelyhood of such binaries to merge in Hubble time.

I will present a complete census of the X-ray binaries known in the Milky Way, in the form of two catalogues dedicated to high-mass and low-mass systems. I will show how all this data can inform us on the past history of X-ray binaries (natal kick, birthplace and age), as well as the current (LVK) and future (LISA) gravitational landscape. This work consitutes a tool that could be used in population synthesis models to better link the current population of compact objects in X-ray binaries to the population of compact mergers that are and will be detected in the coming years.

Auteur principal: FORTIN, Francis (IRAP)

Co-auteurs: Prof. CHATY, Sylvain (Université Paris Cité); Dr GARCIA, Federico (IAR); CHASSANDE-MOTTIN, Eric (CNRS AstroParticule et Cosmologie); M. SIMAZ-BUNZEL, Adolfo (IAR); M. KALSI, Anish

Orateur: FORTIN, Francis (IRAP)

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