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Free-floating planets in star clusters: a dynamical overlook

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The Galaxy has an extremely large number of free-floating planets (ffps), either being bound in star clusters or orbiting freely around the Galaxy. The presence of these objects is common in all large scale objects, whatever we consider brown dwarfs as ffp or not. In my work, I will explain how these objects, with different abundances, remain gravitationally bound or are ejected from star clusters. In order to do so, I used Nbody6++GPU, an N-body direct code which is used for large N systems, such a star clusters.
In this talk, we will also take a look at the capture rate, and the possible formation of planetary systems in these clusters.

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