Sub-Coulomb nuclear studies using the Trojan Horse Method

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The Trojan Horse method (THM) [1] is a well-established experimental technique to measure nuclear reactions of astrophysical interest free of Coulomb suppression and electron screening effects affecting low-energy direct measurements. The THM has been successfully applied many times in the last two decades to reactions connected with fundamental astrophysical problems and mainly with stable beams. In the last years, reactions involving heavier systems, such as ^{12}C have been investigated. I will discuss the basic concepts of the THM and focus on some recent results.

[1] A. Tumino et al., Ann. Rev. Nucl. and Part. Phys. 71 (2021) 345