

Electron screening effects in (p,α) reactions induced on boron isotopes studied via the Trojan Horse Method

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The Trojan Horse Method is a powerful indirect technique allowing one to measure the bare nucleus S(E)-factor and the electron screening potential for astrophysically relevant reactions without the needs of extrapolations. The case of the (p,α) reactions induced on the two boron isotopes $^{10,11}B$ is here discussed in view of the recent Trojan Horse (TH) applications to the quasi-free $^{10,11}B + ^2H$ reactions. The comparison between the TH and the low-energy direct data allowed us to determine the electron screening potential for the $^{11}B(p,\alpha)$ reaction, while preliminary results on the $^{10}B(p,\alpha)$ reaction have been extracted. The work published in J. Phys.: Conf. Ser. **436** 012075 (2013).