

Measurements of the s process neutron sources

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The reactions $^{13}\text{C}(\alpha, n)^{16}\text{O}$ and $^{22}\text{Ne}(\alpha, n)^{25}\text{Mg}$ are the neutron sources for the main and (the latter) the weak s process. Their cross sections need to be known at very low energies to provide for reliable astrophysical reaction rates in the s process energy windows. In the recent years there has been a world wide effort to both directly and indirectly measure these cross sections at low energies, at experimental facilities on the surface of the earth as well as deep underground. In this talk we will give a status update on our knowledge and the measurement of these two crucial reactions for astrophysics.

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