

Stellar evolutionary implications of updated light element (p, α) reaction rates

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The complete understanding of the surface stellar abundances of light elements (lithium, beryllium, and boron) represents one of the most interesting open problems in astrophysics. These elements are gradually destroyed at different depths of stellar interior mainly by (p, α) burning reactions thus their surface abundances are strongly influenced by the nuclear burnings as well as by the extension of the convective envelope. Moreover their different fragility against (p, α) burning reactions allows one to investigate different depths of the stellar interior. The impact on surface abundances of the updated light element burning rates, as obtained with The Trojan Horse Method, is discussed.

Primary author: DEGL'INNOCENTI, Scilla (Pisa University & INFN)

Co-authors: TUMINO, Aurora (Kore University & INFN); SPITALERI, Claudio (INFN - LNS); TOGNELLI, Emanuele (Pisa University); LAMIA, Livio (INFN - LNS); LA COGNATA, Marco Salvatore (INFN - LNS); PRADA MORONI, Pier Giorgio (Pisa University); PIZZONE, Rosario (INFN - LNS); ROMANO, Stefano (INFN - LNS)

Presenter: DEGL'INNOCENTI, Scilla (Pisa University & INFN)

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