

Desired reactions for nuclear production XS [15'+10']

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High-precision cosmic-ray data from ongoing and recent past experiments are being released in the tens of the MeV/n to multi-TeV/n energy range. Astrophysical and dark matter interpretations of these data are limited by the precision of nuclear production cross sections. I will present the procedure we developed to rank nuclear reactions, whose measurements would be a game changer for the determination of key astrophysical quantities (diffusion coefficient, halo size of the Galaxy) and indirect searches for dark matter signatures ; see Génolini et al. (2018+2024).

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