

New results of $^7\text{Be}(n,\gamma)$ and $^7\text{Be}(n,p)$ cross-section measurements

at n_TOF facility, CERN

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Abstract: We have measured the $^7\text{Be}(n,\gamma)$ and $^7\text{Be}(n,p)$ reactions in a wide energy range of neutrons in the second experimental area of n_TOF (CERN). Both reactions are of interest for the long-standing “Cosmological ^7Li problem in Big Bang Nucleosynthesis (BBN). The very high specific activity of ^7Be made this measurements extremely difficult. $^7\text{Be}(n,\gamma)$ reaction cross-section has been measured for the first time in a wide energy range. The preliminary results of both reactions will be presented.