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## A correction to the non-resonant process for elastic channels in R-matrix analysis

Wednesday, 10 November 2021 15:00 (25 minutes)

I will propose a new method for describing the non-resonant process in the R-matrix theory, which is associated with additional background poles which are exclusively given to the incident particles. This method was applied to the simultaneous analysis of the 6Li(p,p0)6Li, 6Li(p,a0)3He, 3He(a,a0)3He and 3He(a,p0)6Li reaction cross-sections. It was found that the present approach was necessary to obtain a reasonable description of all the measured data simultaneously. I will also discuss the theoretical background for our recipe base on the physical aspects of the nuclear reactions, together with an outlook on the evaluation of 13C(a,n)16O cross sections.

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