

## Elastic alpha scattering experiment on $^{64}\text{Zn}$

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Low energy alpha-nucleus optical potentials are an important ingredient of reaction cross section calculations relevant in various processes of heavy element nucleosynthesis, such as the astrophysical  $\gamma$ -process. The optical potential can be studied directly by high precision alpha elastic scattering experiments. In the Institute for Nuclear Research (Atomki) a systematic study of the optical potential has been carried in the last 15 years. One of the last studied isotope was the  $^{64}\text{Zn}$ , where complete angular distributions were measured at two energies close above the Coulomb barrier. Through the example of this study, the experimental techniques needed for a precise alpha elastic scattering measurement will be presented.

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