

## Description of reaction cross sections in a parameter free eikonal model

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Using the eikonal model, we show how to describe the total reaction cross sections of nucleus-nucleus and proton-nucleus reactions over the energy range from 40 MeV to 1000 MeV without introducing any free parameter. The numerical results reproduce fairly well the experimental data for the cross sections of  $^{12}\text{C}$ ,  $^{13}\text{C}$  and  $^{16}\text{C}$  on  $^{12}\text{C}$  which are available at low and high incident energies. Some results for the reactions of proton-Carbon isotopes are presented.

Also we find a reasonable parameterization for the nucleon-nucleon scattering amplitude, differently from previous ones.

*The seminar will be given in English.*

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