

**CALCULATION OF ENERGY DEPENDENCE OF FUSION AND TOTAL
PERIPHERAL REACTION CROSS SECTIONS IN NEW APPROACH TO HEAVY-ION
ELASTIC SCATTERING ANGULAR DISTRIBUTIONS ANALYSIS**

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The method for calculation of energy dependence of fusion (in general case the sum of complete and incomplete fusion, quasifission and deep inelastic collisions) σ_F and total peripheral reaction σ_D cross sections is developed on the basis of finite set of elastic scattering angular distributions analysis for given pair of nuclei. Predictive possibilities of the method are illustrated for the $^{16}\text{O} + ^{208}\text{Pb}$ system, for which calculations are made in the laboratory energy interval $E_{LAB} = 70 - 450$ MeV.