

— 第899回 九大原子核セミナー —

講師 : Pierre Descouvemont 氏 (Université Libre de Bruxelles)

演題 : Scattering of exotic nuclei

日時 : 6月5日(火) 16:30 ~

場所 : 理学部 物理大学院講義室 (理学部2号館2階2263室)

概要

Elastic scattering and breakup reactions represent efficient tools to investigate the structure of exotic nuclei. The main issue for theory is to determine their spectroscopic properties from the measured cross sections. The Continuum Discretized Coupled Channel (CDCC) method (at energies around the Coulomb barrier) and the eikonal method (at high energies) are widely used in reaction theories. Both approaches rely on projectile wave functions as accurate as possible.

In this talk I present recent applications of the CDCC and eikonal methods with various types of projectile wave functions. Two-body (such as $^{11}\text{Be} = ^{10}\text{Be} + n$) and three-body (such as $^{11}\text{Li} = ^9\text{Li} + n + n$) examples are shown. In particular, recent data on the $^{11}\text{Be} + ^{64}\text{Zn}$ elastic scattering are analysed in the CDCC formalism, and the inelastic process is discussed. I also present recent results, obtained with the eikonal method, on the ^{11}Li breakup at high energies.

セミナー終了後, Descouvemont 氏を囲んでの夕食会を予定しております。
参加をご希望の方は, 下記までご連絡ください。

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