

— 第861回九大原子核セミナー —

講師：Tao Ye 氏 (九州大学)

演題：Analysis of deuteron breakup reactions on ${}^7\text{Li}$
for energies up to 100 MeV

日時：9月11日(金) 16時30分～

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

Inclusive nucleon spectra from deuteron breakup reactions on ${}^7\text{Li}$ are analyzed in terms of the continuum discretized coupled channels theory for the elastic breakup process and the Glauber model for the nucleon stripping process. Both theoretical models use the same phenomenological nucleon optical potential of ${}^7\text{Li}$ and have no other free parameters. The calculations reproduce well a prominent bump observed around half the incident energy in experimental inclusive spectra of 40-MeV (d,xn) and 100-MeV (d,xp) reactions at forward angles. The analysis shows that the stripping process is more important than the elastic breakup process in deuteron breakup reactions on ${}^7\text{Li}$.

連絡先：九州大学理学部物理学教室原子核理論研究室
TEL：092-642-2111 (内線 8357)
柏 浩司 (kashiwa@phys.kyushu-u.ac.jp)

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