



Coulomb Dissociation of ^{14}B and ^{15}B to Constrain the Astrophysical r Process

S.G. Altstadt for the R³B Collaboration

INTRODUCTION

EXPERIMENTAL SETUP

ANALYSIS

OUTLOOK



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- Impact of light, neutron-rich nuclei on the astrophysical r process
- Indirect methods are needed to determine reaction rates
- $^7\text{Be}(p,\gamma)^8\text{B}$ was investigated directly at small scale accelerators and in inverse kinematics via CD

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- $^{13}\text{B}(n,\gamma)$ and $^{14}\text{B}(n,\gamma)$ in inverse kinematics via CD
- A 500 AMeV primary beam (^{40}Ar) produces a cocktail beam ($A/Z = 3$)
- Performed at the LAND/R³B setup

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- Analysis principles
- Current status of analysis
- First preliminary results

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- Further steps of analysis
- Future plans