

# Recent Results From the TUNL Split-pole Spectrograph

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Energy in stars is generated by charged particle nuclear reactions occurring below the coulomb barrier. Our understanding of stellar evolution and nucleosynthesis is therefore closely linked to our knowledge of nuclear reaction cross sections. However, directly measuring these reactions at stellar energies in the lab can be impractical or impossible, in which case novel techniques such as transfer reactions must be used to constrain the cross sections. The high-resolution Enge Split-pole spectrograph at the Triangle Universities Nuclear Laboratory (TUNL) is devoted towards performing these types of indirect measurements for astrophysics. Over the last few years the spectrograph was fully rebuilt, upgraded, and tested, and is now under active use. We will report on the capabilities of the facility and highlight some of the first experimental results, which have helped us measure key reactions important to understanding nucleosynthesis in classical novae and abundance anomalies in globular clusters.