

## **RI-beam-induced charge-exchange reaction studies combined with gamma-ray spectroscopy**

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Charge-exchange reactions at intermediate beam energies have been a powerful tool for studying spin-isospin responses of nuclei. They become even more powerful when rare isotope beams are utilized or when combined with gamma-ray spectroscopy, as they gain new spin-isospin selectivities that are not possible with conventional reaction probes, or allow for pinning down specific excitations with precise energy determination. They are useful in particular for studying giant resonances and a variety of other astrophysical phenomena such as stellar electron captures. In this presentation, I will discuss some of these instances including our recent results on rare-isotope-beam-induced charge-exchange reactions including  $(^{12}\text{N},^{12}\text{C})$ ,  $(^{10}\text{Be},^{10}\text{B})$ , and  $(t,^3\text{He})$  experiments performed at RIBF/RIKEN and NSCL/MSU.

### **Summary**

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