

**Plenary Talk**                      PV VIII   Fri 9:00   HBR 14: HS 1  
**Measurement of charge radii and moments of exotic nuclides**  
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pean Organization for Nuclear Research, Geneve, Switzerland  
COLLAPS (COLlinear LAsEr sPectroScopy) stands at ISOLDE as a  
pioneering setup in the field of laser spectroscopy. This experiment  
focuses on the measurement of distinctive nuclear properties of short-  
lived and exotic radioactive nuclei. These properties include nuclear

spins, electromagnetic moments, and charge radii, which are extracted  
through the hyperfine structures and isotope shifts.  
At the heart of COLLAPS's inquiry are fundamental questions about  
the nature of nuclear existence: What are the limits of nuclear exis-  
tence? How do simple patterns emerge in complex nuclei? Are there  
new forms of structure far from stability? To address these questions,  
the COLLAPS team is dedicated to developing laser spectroscopy tech-  
niques of exceptional precision and sensitivity.  
An overview of the COLLAPS setup will be given followed by a  
discussion of some recent results in the tin and lead region.