Abstract Submitted
for the NWS12 Meeting of
The American Physical Society

Yttrium ionization scheme development for Ti:Sa laser based RILIS ANDREA TEIGELHOEFER, JENS LASSEN, ZEINAB ABBOUD, PIERRE BRICAULT, HENNING HEGGEN, PETER KUNZ, RUOHONG LI, THOMAS QUENZEL, SEBASTIAN RAEDER, TRIUMF — Resonant ionization laser ion sources (RILIS) are popular ion sources if intense, radioactive ion beams (RIBs) with minimal isobaric contamination are required. The intensity of the ion beam depends strongly on the applied resonant laser ionization scheme. Based on the all solid state laser system TRIUMF's RILIS (TRILIS) is using, the off-line development towards an efficient ionization scheme for yttrium is presented. Several continuous wavelength scans have been performed to compare different nonresonant ionization schemes and to identify suitable Rydberg or autoionizing states for resonant ionization schemes.

Andrea Teigelhoefer
TRIUMF

Date submitted: 13 Sep 2012 Electronic form version 1.4