

Abstract Submitted
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Electron transfer into the projectile continuum in near-relativistic ion-atom collisions SIEGBERT HAGMANN, Inst. f. Kernphysik, Univ Frankfurt, GSI-Darmstadt, MUAFFAQ NOFAL, GSI-Darmstadt, Max Planck Inst-Heidelberg, THOMAS STÖHLKER, GSI-Darmstadt, Physik. Inst. Univ Heidelberg, ANDREJ SURZHYKOV, Physikal. Inst. Heidelberg, STEFAN FRITZSCHE, GSI-Darmstadt, DORIS JAKUBASSA-AMUNDSEN, Mathem. Inst. LMU-München, CHRISTOPHOR KOZHUHAROV, GSI-Darmstadt, ROBERT MOSHAMMER, JOACHIM ULLRICH, Max Planck Inst. f. Kernphysik Heidelberg, ALEXANDER GUMBERIDSE, UWE SPILLMANN, REGINA REUSCHL, SEBASTIAN HESS, SERGEJ TROTSENKO, FRITZ BOSCH, DIETER LIESEN, GSI-Darmstadt, REINHARD DÖRNER, Inst. f. Kernphysik Univ. Frankfurt, HERMANN ROTHARD, CIRIL-Ganil, Caen, France — Fast ion-atom collisions permit in experiments on electron transfer into the projectile continuum to study the dynamics of ionisation and radiative and non-radiative capture close to threshold; this is an exceedingly sensitive test of theory. We have studied electron emission in forward direction in 2 systems with different projectile Compton profile, $U^{88+} + N_2$ and $Sn^{47+} + N_2$, using the 0^0 electron spectrometer at the supersonic jet target of the ESR storage ring. We present first results for 90AMeV U^{88+} und 300AMeV $Sn^{47+} + N_2$, for which coincidences between cusp electrons with $v_e \approx v_{Proj}$ and charge exchanged projectiles were measured.

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