Abstract Submitted
for the GEC11 Meeting of
The American Physical Society

Small Rare Gas Clusters in a Kinematically Complete (e,2e)-Experiment ALEXANDER DORN, THOMAS PFLUEGER, XUEGUANG REN, ARNE SENFTLEBEN, JOACHIM ULLRICH, Max Planck Institute for Nuclear Physics, Heidelberg, Germany — Single ionization of small Argon and Neon clusters at intermediate energies (i.e. 100 eV and 61 eV, respectively) have been performed. Triple differential cross-sections have been acquired over the complete solid angle of electron emission. 3D emission patterns for dimers and small clusters show significant differences compared to the ionization of the respective atomic target which most likely can be attributed to multiple scattering collisions. Coincidence measurements of two charged cluster fragments allow to obtain more detailed insight in multiple ionization reactions as well as energy and charge transfer processes between different atoms within the cluster.

Alexander Dorn
Max Planck Institute for Nuclear Physics, Heidelberg

Date submitted: 15 Jul 2011 Electronic form version 1.4