Abstract Submitted for the APR14 Meeting of The American Physical Society

Transition from collectivity to single-particle degrees of freedom from magnetic moment measurements in $^{82}_{38}\mathrm{Sr}$ and $^{90}_{38}\mathrm{Sr}^1$ GERFRIED J. KUMBARTZKI, NOEMIE BENCZER-KOLLER, ANDREW RATKIEWICZ, YITZHAK Y. SHARON, SAMANTHA RICE, SEAN BURCHER, Rutgers University, DIEGO A. TORRES, Universidad Nacional de Colombia, KARL-HEINZ SPEIDEL, University Bonn, GULHAN GURDAL, Millsaps College, STEVEN D. PAIN, ORNL, MATTHEW MCCLESKEY, MIKE HENRY, ANTTI SAASTAMOINEN, ALEXANDRA SPIRIDON, MICHAEL SLATER, ANDREW CUDD, VLADIMIR ZHEREBCHEVSKII, SERGEY TORILOV, Texas A&M University — The g factors of excited states in the unstable isotopes $^{82}\mathrm{Sr}$ and $^{90}\mathrm{Sr}$ were measured by the transient field technique. Beams of $^{78}\mathrm{Kr}$ and $^{86}\mathrm{Kr}$ from the K500 cyclotron at Texas A&M University were accelerated to energies just above the Coulomb barrier on carbon to produce the strontium isotopes via an α particle pickup. We report on the α transfer reaction and on the simultaneous g factor measurements of the Coulomb-excited Kr isotopes.

¹The work was supported in part by the U.S. National Science Foundation.

Gerfried Kumbartzki Rutgers Univ

Date submitted: 07 Jan 2014 Electronic form version 1.4