Rubidium-Strontium collisions

MICHAELA KLEINERT, Willamette University, GARRETT POTTER, MARC WHITEHEAD, ELYSE MCENTEE, CHRISTOPHER J. KOLL — The invention of the magneto-optical trap (MOT) in 1987 - which was awarded the Noble Price in Physics 10 years later - has enabled many new and exciting experiments. Among them are precision measurements of basic atomic properties, ultracold collisions, Bose-Einstein Condensates, atom lasers, etc.. Recent developments in the field of atomic and molecular physics have included the creation of diatomic (homo- and heteronuclear) molecules. These ultracold molecules promise to revolutionize physical chemistry, few-body physics, precision measurements and quantum information processing, similar to how ultracold atoms revolutionized AMO physics several years ago. We will present our first results of a mixed alkaline (rubidium) and alkaline-earth (strontium) magneto-optical trap.