

# Charge radii and structural evolution in Sr, Zr and Mo isotopes

R. Rodríguez-Guzmán<sup>1</sup>, P.Sarriguren<sup>1</sup> and L.M. Robledo<sup>2</sup>

<sup>1</sup> Instituto de Estructura de la Materia, CSIC, Serrano 123, E-28006 Madrid, Spain.

<sup>2</sup> Departamento de Física Teórica C-XI, Universidad Autónoma de Madrid, 28049-Madrid, Spain.

The evolution of the ground-state nuclear shapes in neutron-rich Sr, Zr and Mo isotopes, including both even-even and odd-A nuclei, will be discussed within the selfconsistent mean-field approximation based on the Gogny interaction. Calculations for neutron separation energies and charge radii will be presented and compared with available data. A correlation between s shape transition and a discontinuity in those observables is found within our microscopic framework. It is shown that, while in Sr and Zr isotopes the steep behavior observed in the isotopic dependence of the charge raddi is a consequence of a sharp prolate-oblate transition, the smooth behavior found in Mo isotopes has its origin in an emergent region of triaxiality.