

Shape coexistence in n-rich Strontium isotope at REX+ Miniball

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The nuclei in the mass region $A = 100$ around Sr and Zr show a dramatic change of the nuclear ground-state shape from near spherical for $N \leq 58$ to strongly deformed for $N > 60$. Theoretical calculations predict the coexistence of slightly oblate and strongly prolate deformed configurations in the transitional region. However, excited rotational structures based on the highly deformed configuration, which becomes the ground state at $N = 60$, are not firmly established in the lighter isotopes, and the earlier interpretation of a very abrupt change of shape has been challenged by recent experimental results in favor of a rather gradual change. The low spins electromagnetic properties of the neutron-rich ^{96}Sr were studied by low-energy Coulomb excitation using the REX-ISOLDE facility and the MINIBALL detector array. The experiment was performed in June 2007 using a molecular extraction and for the first time at the new position of the Miniball array. Preliminary results will be presented.

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