

SUPERDEFORMATION IN ^{145}Sm

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Two superdeformed bands have been observed in the nucleus ^{145}Sm in an experiment performed with the Gammasphere multidetector array. One of these bands demonstrates a sudden rise in its dynamic moment of inertia at low frequency which may be related to the interaction between $N = 6$ Nilsson orbitals at the Fermi surface. The other band has a moment of inertia identical to the yrast band of ^{149}Gd , making it the fourth case in the $A \approx 150$ mass region of identical bands in nuclei differing by an α particle.

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