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Investigating Wobbling Motion in 135Ce[1] SARIAH PHIPPS, Brigham Young University - Idaho, NIRUPAMA SENSHARMA, UMESH GARG, University of Notre Dame — Due to the breakthrough identification of 135Pr as a wobbling nucleus, A˜130 region has emerged as a new region of interest to look for more such cases. Wobbling and chirality serve as two irrefutable signatures for the existence of triaxiality. Having already established chirality in 133Ce, the present study aims to look for wobbling in the neighboring 135Ce nucleus. A possible longitudinal wobbling band has been identified in this nucleus. Results of spectroscopic properties of the connecting transitions to conclusively establish the wobbling nature of the band will be presented.

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