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We present the first results of a high-precision radial velocity (RV) study of the rapidly oscillating Ap (roAp) star HR1217 that lead to detections of two new equi-spaced with  $34 \mu\text{Hz}$  mode. All the modes show the rotational modulation. The amplitudes of the high amplitude modes are modulated with the published magnetic field variations and reach their maximum and minimum respectively at magnetic extrema. However the phase variability is in disagreement with that expected from the standard oblique pulsator model. The pulsation phase jumps occur exactly at magnetic maximum and close to the phase of magnetic minimum. The phase variability cannot be explained by pure zonal modes or linear combination of magnetically distorted zonal components. The peculiar phase variability is attributed to strong vertical phase changes in the line-forming layers of atmosphere. An echelle-diagram for all known excited modes in HR1217 is constructed. We interpret the "peculiar" spacing of  $f_7 = 242.41 \text{ c/d}$  ( $2805.7 \mu\text{Hz}$ ) mode as due to a mode of degree  $l=4$  which is the only observed member of a system of equally-spaced frequencies. We predict, the existence of another sequence of modes, yet undetected, that should be equally spaced at  $68\mu\text{Hz}$  with  $f_7$ .

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