The effect of a magnetic field on the radiative excitation and damping of high order p-modes

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A rapidly oscillating Ap star pulsates in high-order p-modes under the influence of a strong magnetic field. The strong field modifies the angular and radial dependence of the pulsation amplitude (eigenfunction). Using a quasi-adiabatic analysis, we investigate how the magnetic deformation of the eigenfunction affects the kappa-mechanism excitation and the radiative damping of the pulsation.