$\boxed{ ext{G P17}}$ How to interpret line profile variations in roAp stars

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Recent spectroscopic observations of roAp stars with high spectral resolution and high time resolution show line profile variations which seem to be similar to those seen in rapidly rotating B-type line-profile variables. At first glance these line profile variations seem to be in disagreement with the mode identification based on the photometric observations. We propose an interpretation according to which the observed line profile variations are a manifestation of a shock wave in the high atmosphere near the magnetic polar regions, and show that the line profile variations can be still understood in the framework of the oscillation mode being still consistent with the photometric observations.