

VARIABILITY IN OH/IR STARS WITHIN THE KEPLER FIELD

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Kepler observations have shown that >95% of M stars are variable (Ciardi et al, 2011). The time scales for the variability differ depending on the particulars of the evolutionary phase and evolutionary history of each M star. For this Kepler Guest Observer Proposal, we propose to observe 2 M-giant OH/IR stars not yet observed by Kepler to probe the nature of their variability on timescales of weeks to months. These data will help provide key evidence to understand the timescales of variability which, in turn, may enable us to determine the mechanism driving the variability.