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Title: Mass-Radius Relationship for Old, Cold Jupiters
Type: Contributed Talk
Session: Characterizing Transiting Planets
Abstract: Many hot-Jupiters show evidence for radius inflation beyond that expected from simple structure models. While Ohmic-heating models are a possible explanation for this radius inflation, the vast majority of mass-radius measurements are for hot planets with orbital periods less than 10 days. Measurements of planets in much longer period orbits, at far lower temperatures, are required to provide insight into the properties of planets which have not undergone strong tidal and thermal interactions with a central star, but instead remain (relatively) unperturbed from the state in which they initially formed.

We report on our on-going project to conduct Keck & HARPS-N radial-velocity follow-up observations for a selection of long-period Kepler planets, with the aim of elucidating the mass-radius relation for old, cold Jupiters.