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| Title: | A Relation between Mass and Radius for 59 Exoplanets with $\mathrm{R}<4 \mathrm{R} \oplus$ |
| Type: | Poster |
| Session: | Earth Analogues and Super-Earths |
| Abstract: | We study the masses and radii of the 59 known exoplanets that have radii less than $4 \mathrm{R} \oplus$. We find a linear relation of the form $\mathrm{M} \approx 3 \mathrm{R}$. The RMS of planet masses is $5 \mathrm{M} \oplus$, and our best fit has reduced $\chi 2=$ 4.3 , indicating a large diversity in planet compositions below $4 \mathrm{R} \oplus$. Wu \& Lithwick (2013), who also find $M \approx 3 R$, note that the linear scaling is consistent with a constant escape velocity. |

