

**Gravitational Microlensing Observations Indicate that Cool, Super-Earth Mass Planets are Common**

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Gravitational microlensing planet search surveys are sensitive to planets in orbits at separations of 1-5 AU about the randomly selected lens stars for gravitational microlensing events observed toward the Galactic bulge. Two of the four extrasolar planets detected by this method have a mass in the 5-15 Earth-mass range despite the fact that the method is more than 20 times more sensitive to planets of a Jupiter-mass. This implies that about one third of all stars have such "super-Earth" planets of ~10 Earth-masses at orbital separations where microlensing is most sensitive: 1-5 AU. This also indicates that cool, super-Earths are probably the most common type of extrasolar planet yet to be discovered.