

## Planet Hunting

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In 1995, astronomers began finding planets orbiting stars beyond our solar system. One technique detects how a planet's gravity affects its parent star.

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Jo Pitesky, PlanetQuest Scientists and Cassini Science Planner - What we would like to do is look at other stars where we don't know if there are planets or not and see if they wiggle around on the sky. If they do wiggle, that tells us there is a planet there.

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So far, well over 200 giant planets have been found in the Milky Way galaxy alone.

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Tracy Drain, Flight Engineer – Kepler: Let me tell you guys a little bit about the Kepler mission, which is launching in February of 2009 and its going to be a really exciting mission because its whole purpose is to look for Earth-size planets around other stars outside of the solar system.

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We found over 200 Jupiter size and larger gas-sized planets and we will be able to know that out in that direction of the sky are Earth-sized planets that we can eventually send people to. If you have another space track on the other side you would be able to see it happening on that side too.

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With telescopes in space like Spitzer (currently orbiting) and Kepler (launching in 2009), JPL is engineering new ways to unlock the mysteries of the cosmos.

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They way we use cameras to find stars and planets is that planets like the Earth give off heat, so even if you can't see them very far away next to a bright star with light, you can find heat from a planet.

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JPL is on the cutting edge of space exploration. Answering questions like...

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How do galaxies form?

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How many stars have planets around them?

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Are any of those planets suitable for life?

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Jim Fanson, Project Manager – Kepler: What can be more exciting than exploring space? It really is the final frontier. Its glamorous, it's dramatic, it allows us to understand fundamental questions about how we fit into the cosmos, where we came from, where we are headed.

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At JPL, our eye is on the future

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And together with you the possibilities are endless

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