## News & Stuff

25 April 2012

The Milky Way galaxy is only one of some hundred billion galaxies in the observable Universe, and the Sun is only one of some hundred billion stars in the Milky Way. How does that make you feel?

- 1. Insignificant
- 2. Special
- 3. Both Insignificant and Special
- 4. I don't know

### Secrets of the Sun

With new tools, scientists are striving to better grasp our star and its potentially widely destructive solar storms. **Airs April 25, 2012** on PBS

Posted 01.24.12





NOVA
9PM Wednesday
(that's tonight!)
on PBS



Watch a Preview
00:30
Airs April 25, 2012 on PBS | Check Local Listings

Buy the DVD

Featuring
Dr. Luc Peterson
(Vassar
and Princeton,
and LLNL)

# Telescope Diffraction patterns

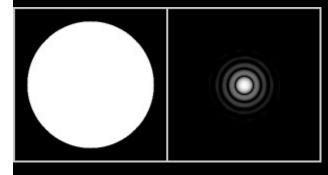
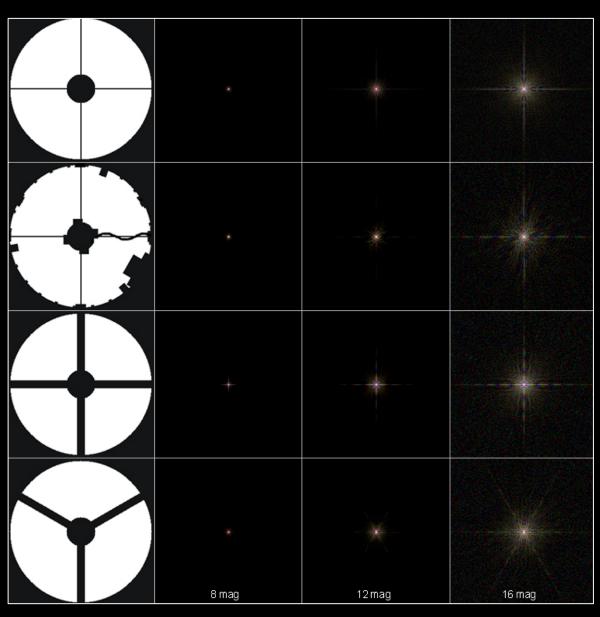


Figure 1: Diffraction Pattern (right) of an unobstructed circular entrance pupil (left), like from a Refractor.



# Asteroid Mining may get real

Planetary Resources, Inc. Held a press conference on Tuesday April 24<sup>th</sup>.

#### Investors include:

- Larry Page
- Eric Schmidt
- James Cameron
- Peter H. Diamandis

### In Pursuit of Riches, and Travelers' Supplies, in the Asteroid Belt



COMING SOON Planetary Resources says it will first launch a spacecraft — a telescope to find small nearby asteroids.

By KENNETH CHANG

Published: April 23, 2012

Perhaps it will be a platinum rush that finally opens up the final frontier.

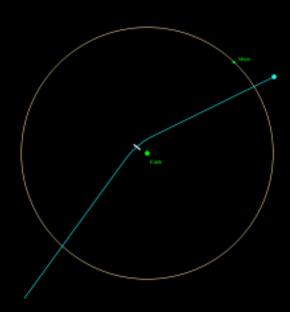
On Tuesday, a new company called Planetary Resources Inc. will unveil its plans to mine asteroids that zip close by <u>Earth</u>, both to provide supplies for future interplanetary travelers and to bring back



http://www.nytimes.com/2012/04/24/science/space/in-pursuit-of-riches-and-travelers-supplies-in-the-asteroid-belt.html http://io9.com/5904599/its-official-james-cameron-and-google-unveil-plans-for-asteroid+mining

### 99942 Apophis

Apophis is a near-Earth asteroid with a diameter of about 350 meters which will make a close approach on Friday, 13 April 2029. It will not strike the Earth or Moon then.



If Apophis passes through a small "gravitational keyhole" in 2029 (which is unlikely) then it will strike the Earth on a future pass on 13 April 2036.

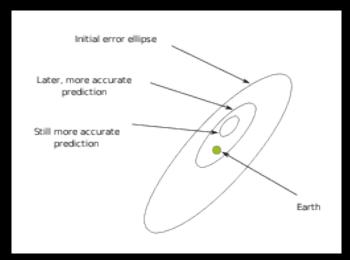


Illustration of a common trend where progressively reduced uncertainty regions result in an asteroid impact probability increasing followed by a sharp decrease.