

Re: Like Rover, Like Asteroid

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From: Hop David (hopspaceHATESSPAaMmM_at_tabletotelephone.com)

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Ron wrote:

- > *Both asteroids take 7.9 years to complete one orbit around the sun*
- > *between Mars and the mammoth gaseous planet Jupiter. Neither follows a*
- > *path that crosses the orbit of other planets and neither will be*
- > *knocked*
- > *out of orbit by the immense gravitational force of Jupiter. They*
- > *belong*
- > *to a small group of asteroids known as the Hilda group that have a 3:2*
- > *orbital resonance with Jupiter. This means that each time Jupiter*
- > *completes two orbits around the sun, the asteroids complete three.*

The above seems to imply a stable orbit because of Jupiter resonance.

ISTR that Pluto also enjoys a stable orbit due to its resonance with Neptune.

But I thought many main belt asteroids were knocked out of the Kirkwood gaps because of Jupiter resonance.

It appears that resonance can be both stabilizing and destabilizing. This perplexes me.

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Hop David

<http://cclowder.net/hop/index.html>