

Title: Is the solar system stable

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Now, most planetary scientists agree that the solar system is unstable and that it is slowly tearing itself apart. The newer models also give astronomers a clearer look at the future--they show...

Thanks to the numerical experiments of the last two decades, we know now that the motion of the planets in the Solar System is chaotic, which prohibits any accurate ...

IntroductionLaplace-Lagrange Stability of The Solar SystemThe Problem of The EccentricitiesChaos in The Solar SystemEvolution of Planetary orbits.Marginal Stability of The Solar System.Planetary Collisions in The Solar SystemCollisions of Mercury, Mars and Venus with The EarthReferencesOver less than one million years, although the motion of the Solar System is chaotic, a quasi periodic model as the one of Laplace-Lagrange(fig. 2) gives a fair representation of the evolution of the planetary orbits.This linear model, although not very precise, provides in particular a good account of the variations of the eccentricity and inclina...See more on scholarpedia .b_imgcap_altitle p strong,.b_imgcap_altitle .b_factrow strong{color:#767676}#b_results

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PSLTranslate this resultWhy is the Solar System so stable ? - Observatoire ...The long-term orbital stability of
the inner planets in our Solar System is still an open problem : the orbits of Mercury, Venus, Earth, and Mars
are ...
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Shortly after discovering the law of gravity, Isaac Newton wondered whether it would allow our Solar System to remain stable. At face value, the problem seems trivial.

Despite this caveat, most evidence indicates that our solar system is astonishingly robust. Over the next five billion years, it is poised ...

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An integration over 200 million years showed that the solar system, and more particularly the system of inner planets (Mercury, Venus, Earth, and Mars), is chaotic, with a ...

Despite this caveat, most evidence indicates that our solar system is astonishingly robust. Over the next five billion years, it is poised to retain its fundamental architecture--until ...

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Most of the calculations agree that eight billion years from now, just before the Sun swallows the inner planets and incinerates the outer ones, all of the planets will still be in orbits very similar ...

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