

KAM theory in celestial mechanics

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Resumen

Even though KAM theory was invented to overcome centennial problems in Celestial Mechanics, it is only quite recently (2004) that there appeared the first complete proofs of general results about the existence of quasi-periodic motions for N body problems. We shall review the main applications of KAM theory to Celestial Mechanics and discuss a few recent extensions concerning the measure and regularity of quasi-periodic trajectories for the planetary N body problem.