

RETROGRADE SATELLITES IN THE CIRCULAR PLANE RESTRICTED THREE-BODY PROBLEM

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Characteristics and stability of simple-periodic retrograde satellites of the lighter body are presented for Hill's case and for all values of the mass ratio $m_2/(m_1 + m_2)$ between 0 and 0.5.

Nonperiodic orbits are presented for some values of the ratio near a critical one, and a new family of double-periodic orbits is found to take an important part in the stability on nonperiodic orbits, so that they counterbalance the instability of simple-periodic family.

DISCUSSION

T. Inoue: Après avoir calculé beaucoup d'orbites contenant des orbites stables est-ce que vous avez trouvé des conditions analytiques pour que les orbites soient stables?

D. Benest: Je ne l'ai pas encore cherché, mais ce serait certainement très intéressant, si elles existent.