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Section 1. Classical Gravity and GR Extensions

Orbital stability of the restricted three-body problem in General Relativity

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We consider the problem of orbital stability of the motion of a test particle in the restricted three-body problem, by using the orbital moment and its time derivative. We show that it is possible to get some insight into the stability properties of the motion of test particles, without knowing the exact solutions of the motion equations.

Keywords: Restricted three-body problem; orbital stability; vector elements

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