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Abstract

In this article we study central configurations of the $(n + 1)$ -body problem. For the planar $(n + 1)$ -body problem we study central configurations performed by $n \geq 2$ bodies with equal masses at the vertices of a regular n -gon and one body with null mass. We also study spatial central configurations considering n bodies with equal masses at the vertices of a regular polyhedron and one body with null mass.

Keywords: Central configuration, $(n + 1)$ -body problem, celestial mechanics

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