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*Remarks on the  $n$ -body dynamics on surfaces of revolution*

We explore the dynamics of  $n$  mass points constrained to move on a surface of revolution and with mutual interaction given by some binary potential. We discuss symmetries and determine certain invariant manifolds. We also show that the equivalent of Saari's conjecture fails. Further, we define homographic motions to be those for which the configuration formed by the bodies is planar, orthogonal to the axis of revolution and remains self-similar in the ambient space. For equal masses, using discrete reduction, we show that such motions form a two-degrees of freedom mechanical system with symmetry for which one may provide a complete orbital description. We also comment on the role of Gaussian curvature on the stability of regular  $n$ -gon relative equilibria.