

GLOBAL GEOMETRY OF PLANARY 3-BODY MOTIONS

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The global geometry of the trajectories of planary 3-body motions can be reduced to the analysis of their corresponding shape curves, which are just curves on the round 2-sphere. By reduction we mean the original motion can be reconstructed (up to a rigid motion) from the data encoded into the shape curve, such as its geodesic curvature and geometry relative to the gradient field of the (Newtonian) potential function. We shall briefly survey some of the known results obtained so far from this rather new approach to the study of the 3-body problem.

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