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*Bifurcations in the N-body problem when the space curvature varies*

We consider the classical N-body problem in spaces of constant curvature  $k$ , namely 3-spheres, hyperbolic 3-spheres, and the Euclidean space. Our equations of motion recover the Newtonian case when  $k=0$ . We show how the integrals of motion bifurcate when  $k$  varies and then focus on the 3-body case to study the bifurcation of triangular solutions.