

On a new set of separability conditions for the Hamilton-Jacobi equation and its application to the Henon-Heiles system.

Franco Magri

May 8, 2005

Abstract

In the first part of the talk a new algorithm for finding the separation coordinates for an integrable Hamiltonian system on a Poisson manifold is presented. The algorithm is then illustrated in the case of the Henon-Heiles system , by contrasting it with the approach proposed several years ago by Ravoson, Gavrilov, and Caboz.