The $8^{\rm th}$ International Conference Geometry, Dynamics, Integrable Systems

GDIS 2022

LINEARIZATION BY MEANS OF A FUNCTIONAL PARAMETER

Dmitry Treschev

ABSTRACT. Consider a Hamiltonian system near an equilibrium point or a symplectic map near a fixed point in a phase space of dimension 2n. Suppose the system depends on a functional parameter, a function of n variables. We study the possibility to choose the functional parameter to make the system conjugated to a linear system on an open set.

44

Steklov Mathematical Institute, Moscow, Russia.