

# Local dynamics of symmetric Hamiltonian systems with application to the affine rigid body

**typescript - Intermediate Dynamics: A Linear Algebraic Approach**



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## Affinely rigid body and Hamiltonian systems on $GL(n, \mathbb{R})$

This gives rise to the issues of variations of periods over the base mentioned in the introductory overview. The treatment is nonrelativistic and classical. Hitchin map The cases in which  $X$  is genus 0 and 1 were solved explicitly by Nekrasov 1996 using explicit parametrizations of the moduli spaces; this includes the case of insertions singular curves , yielding elliptic Gaudin models.

## Bifurcations in Gyroscopic Systems with an Application to Rotating Shafts on JSTOR

It turns out that the general structure of dynamical balance laws resembles that derived in general relativity for the pole-dipole particle.

## Local dynamics of symmetric Hamiltonian systems with application to the affine rigid body

First of all we present a geometric interpretation of the polar and the two-polar decomposition of affine motion. The symmetries of different relative equilibria are found, based on the study of the lattice of isotropy subgroups of  $Z_2 \times Z_2$  on the phase space.

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Here  $U(t)u(0)$  is the solution of the free equation, that is, the associated linear equation, supplemented with initial data  $u(0)$ ; for instance, the Airy equation is the free equation related to the KdV equation. That they are complex here, with imaginary part  $\sim \Gamma(\omega)$ , is due to NLS being an infinite-dimensional Hamiltonian system with discrete spectral states resonating with continuum spectral states.

### Section1.1

Slice reduction is applied in a neighbourhood of a spherical ellipsoid of equilibrium leading to different reduced dynamics. The formulation in this set up of the so-called Dedekind theorem on ellipsoidal figures of equilibrium for the Dirichlet problem is shown to be a straightforward consequence of  $Z_2$  symmetry and of the relative equilibrium theorem.

## **Intermediate Dynamics: A Linear Algebraic Approach**

Different, noncanonical Poisson brackets can arise from symmetries. The study of the asymptotics and of the dynamical properties of such a system deserves another analysis. This result is an important step in the ergodic analysis of our Hamiltonian dynamical systems.

### **Stabilizing the coupled orbit**

We discuss certain integrability problems and special solutions generalizing so-called stationary ellipsoids studied in astrophysics. This was first observed by Q. For this condition to hold, we require that the vector fields corresponding to the Hamiltonians in involution still have no poles on a compactification of the fibers on M C.

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Le Hong Van and A. Defining a roadmap to achieving low carbon targets and explaining these targets in quantitative form as much as possible is known as backcasting. However, enormous potential identified in renewable energy sector with favorable CO<sub>2</sub> mitigation the government is compromising with limited financial resources.

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