

إعلان عن محاضرات في الرياضيات Cours Spéciaux de l'ENS 2019-2020

Mr. Abdelghani Zeghib (CNRS, ENS Lyon, France),

sera au Laboratoire d'EDPNL & HM à l'ENS- Kouba

Du 09 au 13 février 2020

Il donnera une série de conférences sur :

Geometry and Topology of Configuration Spaces.

Abstract

"To a mechanical system S , one associates its configuration space $\text{Conf}(S)$, the set of all its states, i.e. its realizations in the ambient space, which may be for instance the Euclidean space of dimension 2 or 3. Examples of rigid systems are given by a pendulum with $\text{Conf}(S)$ being a circle or a sphere (according to having 2 or 3 degrees of freedom). The next example is the solid pivoting around a fixed center for which Conf is the orthogonal group. We are interested here in "piecewise" rigid systems, i.e articulated systems, the simplest example of which is a double of more generally multi-pendulum (here Conf becomes a product of circles or spheres). Actually, these spaces also have a geometry given by a Riemannian metric encoded by their kinematic energy. The free evolution of the system is given by the geodesic flow of this metric. The lectures will be around the question of what topology, geometry and geodesic flow can occur in this way?"

Dimanche 09 février à 14:00,

Mardi 11 février à 10:00, ,

Mercredi 12 février à 10:00.

Lundi 10 février à 14:00, : exposé au séminaire du laboratoire,

Titre : Introduction to Dynamical Systems: Some History and Examples

الدعوة عامة لكل الباحثين

القبة في 28 جانفي 2020
مدير المخبر
عبد الحفيظ مكران