

Le mercredi 15 novembre 2017 de 15h   16h aura lieu dans la salle du Conseil de l'ISTIA, Universit  d'Angers, un s minaire de S ny Diatta & Guillaume Moroz (Charg  de Recherche INRIA Nancy - Grand Est -  quipe VEGAS).

Title: **Projection of analytic surfaces**

Abstract: For some robotic problems we need to represent a singular surface that is the projection of a smooth surface embedded in higher dimension. In this work, we focus on the problem of computing a triangulation of the projection on \mathbb{R}^3 of an analytic surface embedded in \mathbb{R}^4 . Based on Transversality and Singularity Classification theories, we first show that, under generic assumptions, the set of singularities of the projected surface are generated by only three types of multi-germs: double points, triple points and cross-caps. Then, using this information we design an algorithm taking as input an analytic surface and returning a triangulation isotopic to its projected surface.

(joint work with Marc Pouget)
