

**Séminaire de : Giuliano Lazzaroni, post-doctorant à l'Institut D'Alembert, Paris 6**  
**12 octobre 2010, 14:00**  
**Salle R002 du LaMSID, EDF R&D Clamart**

**A model for crack propagation based on viscous approximation**

In this seminar I will describe a result of crack growth, obtained in collaboration with Rodica Toader. In the setting of antiplane linearized elasticity, we show the existence of quasistatic evolutions of cracks in brittle materials by using a vanishing viscosity approach, thus taking into account local minimization.

The main feature of our model is that the path followed by the crack needs not be prescribed a priori: indeed, it is found as the limit of curves obtained by an incremental procedure.