



# NICE WEAK KAM METHODS IN NICE

2-7 FEBRUARY 2009

**Renato Iturriaga**  
CIMAT, Mexico

## Weak KAM solutions in a minimax framework

### Abstract

I present the work of my student Porfirio Toledo about Weak KAM solutions for strongly, but controlled, non convex Lagrangians. More precisely we consider Lagrangians of the form  $L(x, y, V) - G(x, y, W)$  being  $V, W$  the derivatives in the  $x, y$  variables.  $L$  and  $G$  are convex, so the total Lagrangian is convex on some variables and concave on the other set. We replace the minimizing techniques with a minimax framework.