

# Sharp Denjoy's theorems for commuting diffeomorphisms

Andrés Navas  
IHÉS

Using probabilistic methods, it is possible to improve several results of 1-dimensional dynamics which are classical in the  $C^2$  case. In this talk I will concentrate on Denjoy's Theorem, by proving that if two commuting circle diffeomorphisms of class  $C^{3/2+}$  have rationally independent rotation numbers, then all the orbits by the  $Z^2$ -group generated by them are dense.