

SEMINARIO SISTEMAS DINÁMICOS DE SANTIAGO

EXPOSITOR(A): Hélène Eynard-Bontemps (Université Grenoble Alpes, Francia)

TÍTULO: *Conjugacy classes of germs near a hyperbolic fixed point in dimension 1* (j.w. with Andrés Navas)

RESUMEN: A famous linearization theorem of Sternberg claims that, in dimension 1, near a hyperbolic fixed point (i.e. a fixed point where the derivative differs from 1), a germ of C^r diffeomorphism is C^r conjugate to its linear part when r is greater than or equal to 2. This result fails to be true in lower regularity, even for C^1 diffeomorphisms with absolutely continuous derivative. We will explain how to construct whole continuous families of such germs with the same derivative at a common fixed point but which are not pairwise bi-Lipschitz conjugate, or which are pairwise bi-Lipschitz but not C^1 conjugate. This problem arose as part of a reflexion on how to deform actions of Z^d on one-dimensional manifolds in intermediate regularity.

DÍA / HORA Lunes 26 de diciembre, 2022 / 4:30 PM - 5:30 PM.

LUGAR Sala de Seminarios Maryam Mirzakhani, Departamento de Matemáticas, Campus Juan Gómez Millas, Universidad de Chile

Para mayor información comunicarse con los siguientes e-mails: raimundo.briceno@mat.uc.cl

