

# Distributionally uniquely ergodic diffeomorphisms

Alejandro Kocsard  
Universidade Federal Fluminense, Brazil

**Abstract:** Invariant distributions appear as natural obstructions for the existence of smooth solutions for cohomological equations and they have been extensively used for estimating ergodic deviations, especially for certain parabolic and hyperbolic systems.

On the other hand, within elliptic systems, ergodic rigid translations on tori are prototypical examples of *distributionally uniquely ergodic* systems (*DUE* for short), i.e. the Lebesgue measure is the only (up to multiplication by a constant) invariant distribution. Till very recently, they were the only known examples of DUE diffeomorphisms.

In this talk we shall discuss some general properties of DUE systems and present some new examples.