

# Regularity of the Lyapunov exponents of random $SL(2, \mathbb{R})$ -cocycles

Pedro Duarte<sup>1</sup>

<sup>1</sup> Lisbon

Consider the Lyapunov exponent of a random  $SL(2, \mathbb{R})$ -cocycle as a function of a finite tuple of  $SL(2, \mathbb{R})$  matrices. How is the regularity of this function at some tuple  $A$  conditioned by the dynamics of  $A$  on the projective bundle? We will survey on recent joint work with J. Bezerra, A. Cai, C. Freijo and S. Klein that gives a first answer to this question.