

Contribution Title: LIMIT OF THE INFINITE HORIZON DISCOUNTED
 HAMILTON JACOBI EQUATION
Authors: R. Iturriaga, H. Sanchez-Morgado
Presenting author: Sanchez-Morgado H.
Affiliation: Universidad Nacional Autonoma de Mexico
E-mail: hector@math.unam.mx
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We consider the infinite horizon discounted optimal control problem and study the convergence of solutions of the Hamilton Jacobi equation when the discount vanishes. If the Aubry set consists in a finite number of hyperbolic periodic orbits or critical points, we give an explicit expression for the limit using the Peierls barrier. Additionally, we give a new characterization of Mañé's critical value as for which the family of viscosity solutions is equibounded.