

DENJOY-SCHWARTZ AND HAMILTON-JACOBI

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Given a C^2 Hamiltonian $H(x, p)$, C^2 -strictly convex in the moment variable, it has been shown by Patrick Bernard that one can always find C^1 strict subsolutions with locally Lipschitz derivative of the Hamilton-Jacobi equation. After explaining the general background, the talk will concentrate on the constraints imposed on smoother critical subsolutions by the implications of the classical Denjoy-Schwartz theory of Dynamical Systems on surfaces.