

1018-37-202

Andrew Torok* (torok@math.uh.edu), Department of Mathematics, PGH 651, University of Houston, Houston, TX 77204-3008, and **Matthew Nicol** (nicol@math.uh.edu), Department of Mathematics, PGH 651, University of Houston, Houston, TX 77204-3008. *Whitney regularity for solutions to the coboundary equation on Cantor sets.*

We prove Whitney regularity results for the solutions of the coboundary equation over dynamically defined Cantor sets satisfying a natural geometric regularity condition, in particular hyperbolic basic sets in dimension two. To do this we prove an analogue of Journé's well-known result in the context of Cantor sets satisfying geometric regularity conditions. (Received March 06, 2006)