

1096-14-1689

Eric Katz* (eeekatz@uwaterloo.ca), 200 University Avenue West, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada. *P-adic integration on algebraic curves in the bad reduction case.*

P-adic integration was introduced by Coleman in the good reduction case and extended in distinct directions by Colmez and Berkovich. We discuss a comparison theorem between the Colmez and Berkovich integrals, applications to Diophantine geometry following work of Stoll, and an algorithm for computing these integrals for hyperelliptic curves based on the work of Balakrishnan and others. This is joint work with David Zureick-Brown and possibly some others too. (Received September 16, 2013)