Meeting: 999, Nashville, Tennessee, SS 3A, Special Session on Index Theory and the Topology of Manifolds

999-55-94 Alexander Dranishnikov* (dranish@math.ufl.edu), Department of Mathematics, UF, PO Box 118105, Gainesville, FL 32611-8105. The Mod p Higson Conjecture.

The Mod p Higson conjecture for a metric space X states that the Higson compactification of X is acyclic for the mod pČech cohomology. We show the connection between the Mod p Higson conjecture for $E\Gamma$ and the Novikov conjecture for Γ . Using this connection we prove the following

THEOREM.(D-Ferry-Weinberger) If a discrete group Γ has finite asymptotic dimension and $B\Gamma$ is a finite complex, then the integral Novikov conjecture holds fro Γ .

The rational (classical) Novikov conjecture for these groups was proved earlier by G. Yu. (Received August 13, 2004)