Meeting: 1003, Atlanta, Georgia, SS 32A, AMS Special Session on Arithmetic Algebraic Geometry, I

1003-11-554 **Pavlos Tzermias*** (`tzermias@math.utk.edu`), Department of Mathematics, University of Tennessee, Knoxville, TN 37996-1300. *Almost rational torsion points on Fermat quotient curves.*
We apply Ribet's theory of almost rational points to the case of Fermat quotient curves. In particular, we give an unconditional explicit description of the cuspidal torsion packets on the non-hyperelliptic Fermat quotients. This complements a theorem of Grant and Shaulis for the hyperelliptic case and extends previous results of Coleman, Tamagawa and the author for the general case. (Received September 21, 2004)