1011-20-128 Francesco Matucci* (matucci@math.cornell.edu), 310 Malott Hall, Ithaca, NY 14853, and Martin Kassabov (kassabov@math.cornell.edu), 310 Malott Hall, Ithaca, NY 14853. The Simultaneous Conjugacy Problem for Thompson's Group F is Solvable. Preliminary report.

I will discuss the an alternative approach to the Conjugacy Problem of Thompson's group $F \cong PL_2(I)$ which, unlike the usual one using diagram groups, is also applicable to the group of piecewise-linear orientation-preserving homeomorphisms of the unit interval with a finite number of breakpoints (often denoted with $PL_0(I)$). These techniques can be used to solve the simultaneous conjugacy problem. (Received August 22, 2005)