

1096-VJ-2708 **Amanda Taylor*** (taylor@math.binghamton.edu), Department of Mathematical Sciences,
Binghamton University, Binghamton, NY 13902-6000. *Locally Solvable Subgroups of $PLo(I)$.*

A locally solvable group is a group in which every finitely generated subgroup is solvable. Using a geometric criterion that is equivalent to local solvability in $PLo(I)$, we sketch a proof that locally solvable subgroups of $PLo(I)$ are countable. The result also holds for Thompson's Group F and some of its generalizations, as they are subgroups of $PLo(I)$. The hope is that this work, along with further research about classifying locally solvable subgroups, will be a step toward solving conjectures surrounding elementary amenable subgroups of $PLo(I)$, hence F and its siblings. (Received September 18, 2013)