1104-53-72   **Michael Bradford Williams** (`mwilliams@math.ucla.edu`), Department of Mathematics, UCLA, Los Angeles, CA 90095, and **Haotian Wu*** (`hwu@uoregon.edu`), Department of Mathematics, University of Oregon, Eugene, OR 97403. *Dynamical stability of algebraic Ricci solitons.*

We consider dynamical stability for a modified Ricci flow equation whose stationary solutions include Einstein and Ricci soliton metrics. We focus on homogeneous metrics on non-compact manifolds. Following the program of Guenther, Isenberg, and Knopf, we define a class of weighted little Hölder spaces with certain interpolation properties that allow the use of maximal regularity theory and the application of a stability theorem of Simonett. With this, we derive two stability theorems, one for a class of Einstein metrics and one for a class of non-Einstein Ricci solitons. Using linear stability results of Jablonski, Petersen, and Williams, we obtain dynamical stability for many specific Einstein and Ricci soliton metrics on simply connected solvable Lie groups. (Received August 19, 2014)