1063-53-151   **Michael Jablonski*** (`mjablonski@math.ou.edu`), Department of Mathematics, University of Oklahoma, Norman, OK 73019-0315. *Ricci soliton metrics on solvable Lie groups.*

By studying the moment map on the space of Lie brackets, we demonstrate how left-invariant Ricci solitons on solvable Lie groups may be obtained by consecutively following two natural curves of metrics.

Using these curves of metrics, we study the isometry groups of left-invariant metrics on completely solvable unimodular Lie groups (this includes nilpotent groups). Within this class of Lie groups, we show that Ricci soliton metrics (when they exist) have maximal isometry groups among all left-invariant metrics. (Received August 14, 2010)