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**T. H. Wears\*** (wearsth@longwood.edu). *Lorentzian Ricci Solitons on Solvable Lie groups*. Preliminary report.

We present the preliminary results of an investigation of Lorentzian Ricci soliton metrics on solvable Lie groups. Focusing on solvable Lie groups of dimensions four, five and six, we use the automorphisms of the corresponding Lie algebra to reduce the number of free parameters in an arbitrary left invariant Lorentzian metric by establishing canonical forms for the metrics on the particular Lie group in question. We then analyze the resulting canonical forms to classify the left invariant metrics that are algebraic Ricci solitons. We present the results for several solvable Lie groups showing that the structure of Lorentzian Ricci solitons is quite rich and that a solvable Lie group can support inequivalent and isometrically distinct Lorentzian soliton metrics. (Received September 20, 2016)