1108-53-317 Megan M Kerr* (mkerr@wellesley.edu), Department of Mathematics, Wellesley College, 106 Central St, Wellesley, MA 02482, and Tracy L Payne, Department of Mathematics, Idaho State University, Pocatello, ID 83209-8085. Submanifolds of solvmanifolds: a generalization to nilsolitons. Preliminary report.

In a 2011 paper, H. Tamaru obtained new examples of Einstein solvmanifolds via parabolic subalgebras of semisimple Lie algebras, to build solvable subalgebras by restricting to a subset Λ' of the set Λ of simple roots, using this subset to generate a subalgebra. The corresponding submanifold, given a natural inner product, is called an *attached* solvmanifold. Tamaru proves that when the original solvmanifold is Einstein, then the attached subspace is also Einstein. That is, the constant Ricci curvature is inherited, unchanged.

We explore when Tamaru's method can be extended beyond the setting of a solvmanifold corresponding to a symmetric space, to an arbitrary nilsoliton with Einstein solvable extension, so that the same results carry over. (Received January 17, 2015)