1062-58-160 **Chenxu He*** (he.chenxu@lehigh.edu), Christmas-Saucon Hall, 14 E. Packer Ave, Bethlehem, PA 18015, **Peter Petersen** (petersen@math.ucla.edu), UCLA Mathematics Department, 520 Portola Plaza, Los Angeles, CA 90095, and **William Wylie** (wylie@math.upenn.edu), 209 South 33rd Street, Phialdelphia, PA 19104. *On m-Quasi Einstein Metrics.*

We say an n-dimensional Riemannian manifold is an m-Quasi Einstein metric if it is the base of an (n+m)-dimensional warped product Einstein manifold. We view the m-Quasi Einstein equation as a generalization of the Einstein equation (since an Einstein manifold is the base of a trivial product Einstein manifold). The m-Quasi Einstein equation is also closely related to the gradient Ricci soliton equation. In this talk I will give an overview of some earlier results about the classification of m-quasi Einstein metrics and show some new results under various curvature and symmetry conditions. This is joint work with Peter Petersen from UCLA and William Wylie from UPenn. (Received August 05, 2010)