1054-53-266　　　　**William Wylie*** (`wylie@math.upenn.edu`), Department of Mathematics, David Rittenhouse Lab, 209 South 33rd Street, Philadelphia, PA 19104-6395. *On the classification of m-Quasi-Einstein metrics.*

We say an n-dimensional Riemannian manifold is m-Quasi-Einstein if it is the base of an n+m-dimensional warped product Einstein manifold. Quasi-Einstein manifolds are a natural generalization of Einstein manifolds from the perspective of curvature dimension inequalities and are also related to gradient Ricci solitons. I will discuss conditions on symmetry and curvature under which we can classify Quasi-Einstein metrics. This is joint work with Chenxu He of UPenn and Peter Petersen of UCLA. (Received September 15, 2009)