1163-53-87   **Alice Wu Lim*** (`awlim100@syr.edu`), Syracuse, NY 13202. *Which locally homogeneous compact 3-manifolds admit m-Quasi Einstein metrics?*

In this poster, we will answer the question, "which locally homogeneous compact 3-manifolds admit m-quasi Einstein metrics?" First, we will define locally homogeneous and m-quasi Einstein using images and flow charts. We will use the Bakry Émery Ricci versions of Myers' Theorem and the Split-ting Theorem, as well as the Lie structure of well known Lie groups to answer our question. We will summarize our findings in a table. We will also give some more general statements about m-quasi Einstein metrics in any dimension. (Received August 11, 2020)

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