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**Ronan J. Conlon\***, rconlon@math.mcmaster.ca, and **Hans-Joachim Hein**. *A theorem of existence for Asymptotically Conical Calabi-Yau manifolds.*

Asymptotically Conical (AC) Calabi-Yau manifolds are Ricci-flat Kahler manifolds that resemble a Ricci-flat Kahler cone at infinity. I will describe an existence theorem for AC Calabi-Yau manifolds which, in particular, yields a refinement of an existence theorem of Tian and Yau for such manifolds. Time pending, I will also discuss some examples. This is ongoing work with Hans-Joachim Hein. (Received July 10, 2012)