

1078-53-170

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Gromov-Hausdorff collapse for abelian fibred Calabi-Yau manifolds.

We discuss recent results extending work of Gross-Wilson and Tosatti. Given an abelian fibration $f : M \rightarrow N$ with M a Calabi-Yau manifold and the general fibre of f an abelian variety, we consider the behaviour of suitably normalized Ricci-flat metrics with Kähler class approaching the pull-back of a Kähler class on N . Tosatti previously had proved a weak convergence in this situation; here, we prove a sufficiently strong convergence result which is enough to conclude Gromov-Hausdorff collapse, with a large subset of M collapsing to a large subset of N . (Received December 05, 2011)