

1167-53-242

**Joshua Jordan\*** (jpporda1@uci.edu), Aldritch Hall, Office 410V, Irvine, CA 92617, and **Mario Garcia-Fernandez** and **Jeffery Streets**. *Pluriclosed Flow on Bismut-flat Backgrounds*.

We use the tools of Hitchin's generalized geometry to build on ideas introduced by Bismut (Math. Ann. 1989) to study non-Kähler manifolds. In particular, we describe the evolution of a Hermitian metric  $\omega$  in a fixed Aeppli class by Streets and Tian's pluriclosed flow in terms of a Hermitian metric  $G$  on a holomorphic vector bundle with a twisted  $\bar{\partial}$ -operator. From this we show that, on a Bismut-flat background, the pluriclosed flow has long-time existence and converges to a Bismut-flat metric. (Received March 08, 2021)