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Casey J Machen* (machenc@gmail.com), Department of Mathematics, MSU, C524 Wells Hall, 619 Red Cedar Road, East Lansing, MI 48824. *Abelian Varieties Associated to Certain Families of Complex Projective 4-folds.*

The Kuga-Satake construction associates an abelian variety to a polarized K3-surface X . This is done using the Clifford algebra corresponding to the quadratic form arising from the cohomology pairing on $H^2(X, \mathbb{Q})$. We investigate when this construction can be generalized. Specifically, we associate an abelian variety to certain families of complex projective 4-folds using the generalized Clifford algebra associated to the quartic form on H^2 . This is a work in progress. (Received January 16, 2015)