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Chase Bender, Debraj Chakrabarti, Luke Edholm* (edholm@umich.edu) and **Meera Mainkar**. *Complexity of singular Reinhardt domains and the regularity of the Bergman projection.*

We consider a large class of singular Reinhardt domains in \mathbb{C}^n and develop a general framework from which we may understand the L^p -regularity of their Bergman projections. The domains in this class may be realized as quotients of simpler domains under the action of a finite group of biholomorphic automorphisms. It is shown that the range of Bergman L^p -boundedness is closely connected to the “arithmetic complexity” of the original domain, a notion that will be made precise.

This talk combines various projects of the speaker with collaborators Chase Bender, Debraj Chakrabarti and Meera Mainkar. (Received August 31, 2020)