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Roy Joshua* (joshua.1@math.osu.edu), Roy Joshua, Department of Mathematics, The Ohio State University, 231 West 18th Ave, Columbus, OH 43210, and **Reza Akhtar** (reza@calico.mth.muohio.edu), Department of Mathematics, Miami University, Oxford, OH 45056. *Quantum stabilizer codes from toric varieties.*

In this talk, we explore the construction of algebraic codes from toric varieties using toric residues. Though algebraic codes have been constructed from toric varieties, they have largely been evaluation codes, where one evaluates the sections of a line bundle at a collection of rational points. Instead of evaluating sections of a line bundle at rational points, we compute the residues of differential forms at these points. We show that this method produces codes that are close to the dual of those produced by the first technique. We conclude by studying several examples, and also discussing applications of this technique to the construction of quantum stabilizer codes. (Received July 19, 2015)