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Matthew Fickus* (matthew.fickus@afit.edu), Department of Mathematics & Statistics, Air Force Institute of Technology, 2950 Hobson Way, Wright-Patterson AFB, OH 45433. *Some recent advances on equiangular tight frames.*

An equiangular tight frame (ETF) is a type of optimal packing of lines in Euclidean space. They arise in several applications, including compressed sensing and coding theory. ETFs are difficult to construct, and all known infinite families of them involve some type of combinatorial design. We discuss several contributions to the field we've made in the past year, including some new infinite families of ETFs related to balanced incomplete block designs. (Received August 15, 2016)