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Joseph W. Iverson* (jiverson@math.umd.edu), **John Jasper** (john.jasper@uc.edu) and **Dustin G. Mixon** (dustin.mixon@afit.edu). *Equiangular Tight Frames from Association Schemes*.

Association schemes are combinatorial objects that simultaneously generalize the notions of strongly regular graphs, finite abelian groups, and Gelfand pairs of (possibly nonabelian) finite groups. We explain how an association scheme naturally produces a finite number of unit-norm tight frames (FUNTFs). When our scheme is an abelian group, we precisely obtain its harmonic frames, but for general association schemes, we get a much broader family of FUNTFs. Among them are equiangular tight frames which are *not* harmonic, and which do not obey the integrality conditions imposed by abelian groups. (Received December 09, 2016)