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Chris Godsil* (cgodsil@uwaterloo.ca), Combinatorics & Optimization, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada. *Covers of graphs and equiangular tight frames.*

An r -fold cover of a graph X is obtained by replacing each vertex of X by a set of r vertices, and then replacing each edge by a set of r vertex-disjoint edges (an r -matching) joining the corresponding r -tuples. Covers of the complete graph are interesting, in part because in highly regular cases they give rise to equiangular tight frames. I will present my view of how this construction works, and I will discuss some generalizations. (Received January 16, 2017)