1145-05-1611   **Emily J King***, king@math.uni-bremen.de. *Difference Sets and Grassmannian Packings.*

It is often of interest to find redundant sets of vectors which emulate orthonormal bases by having pairwise angles as large as possible and by yielding a resolution of the identity. Such objects are called Grassmannian frames. In this talk, a simple construction of such sets via so-called difference sets will be presented, as well as some novel generalizations. Prior knowledge of frame theory or algebraic combinatorics will not be required to follow the talk. (Received September 23, 2018)