1154-46-1072 **J. Alejandro Chávez-Domínguez***, Department of Mathematics, University of Oklahoma, Norman, OK 73019-3103. *Constructing tight unit norm frames for finite-dimensional Banach spaces using group actions.* Preliminary report.

Frames for Hilbert spaces, as overcomplete versions of bases, are quite useful in applications because they provide decompositions that are more robust. Those frames that consist of vectors of norm one and are additionally tight (FUNTFs) have even more computational advantages, e.g. they minimize the reconstruction error due to the loss of a single coefficient.

FUNTFs for finite-dimensional Banach spaces have recently been introduced, and they have been shown to enjoy some of the same desirable properties as their Hilbertian counterparts (such as the aforementioned reconstruction error minimization). However, very few examples of such FUNTFs for Banach spaces are known.

In this talk we generalize, from the Hilbertian to the Banach case, various results regarding the construction of FUNTFs using group actions. (Received September 13, 2019)