1108-15-269 **Yeonhyang Kim*** (`kim4y@cmich.edu`), 906 Southmoor Rd, Mt. Pleasant, MI 48858, and **Rachel Domagalski**, **Sivaram K. Narayan**, **Hong Suh** and **Xingyu Zhang**. *Structures of minimal scalings in R^n*.

A tight frame in R^n is a redundant system which has a reconstruction formula similar to that of an orthonormal basis. Given a spanning set of vectors $\{f_i\}_{i=1}^k$ in R^n satisfying a certain property, one can manipulate the length of the vectors to obtain a tight frame. Such a spanning set is called a scalable frame. A scaling w is a minimal scaling if $\{w(i)f_i : w(i) > 0\}$ has no proper scalable subframes. In this talk, we present the uniqueness of the orthogonal partitioning property of any set of minimal scalings, and provide a construction of scalable frames by extending the standard orthonormal basis. (Received January 16, 2015)