## 1056-46-761 **Palle E. T. Jorgensen\***, Dept Math MLH, University of Iowa, Iowa City, IA. Frames for $L^2$ of measures with scale self-similarity. Preliminary report.

In the talk we present some results on spectral theory and harmonic analysis of measures with scale self-similarity. This will be from joint papers with several co-authors, D. Dutkay, S. Pedersen, K. Kornelson, K. Shuman. We further show that in this context, issues of a priori estimation of frame bounds entails new tools typically not used in more traditional approaches. A connection between this and the Kadison-Singer conjecture will be mentioned. (Received September 16, 2009)