## 1120-42-14 Marcin Bownik<sup>\*</sup>, Department of Mathematics, University of Oregon, Eugene, OR 97403, and Pete Casazza, Adam Marcus and Darrin Speegle. Improved bounds in Weaver and Feichtinger Conjectures.

In this talk we present some results related to the recent solution of the Kadison-Singer problem by Marcus, Spielman, and Srivastava. We sharpen the constant in the  $KS_2$  conjecture of Weaver that plays a key role in this solution. We then apply this result to prove optimal asymptotic bounds on the size of partitions in the Feichtinger conjecture. The talk is based on a joint work with Casazza, Marcus, and Speegle. (Received January 12, 2016)