## 1125-65-1600 **James G Nagy\*** (nagy@mathcs.emory.edu), Atlanta, GA 30322. Kronecker product approximations for image reconstruction problems.

Many image reconstruction problems can be formulated as large scale linear systems. In many applications it is important to compute solutions of these linear very efficiently. This is often done by exploiting structure of the matrices. In this talk we describe how Kronecker arise naturally in many imaging applications, and how their properties can be exploited in both direct factorization methods and in iterative algorithms. (Received September 18, 2016)