1105-41-88   **Jeffrey P. Ledford*** (`jpledford@vcu.edu`), 1015 Floyd Avenue, P.O. Box 842014, Richmond, VA 23284. *Bivariate Interpolation with the Poisson Kernel.* Preliminary report.

In this talk we introduce the bivariate Poisson interpolation operator and prove various properties of this operator. The main result concerns functions whose Fourier transforms are concentrated near the origin, specifically functions belonging to the Paley-Wiener space PW_{B_β}. We show that one may recover these functions from their samples on a complete interpolating sequence for $[-\delta, \delta]^2$ by using the Poisson interpolation operator, provided that $0 < \beta < (3-\sqrt{8})\delta$. (Received September 08, 2014)