1106-41-1640   **Jeff Ledford*** (`jpledford@vcu.edu`), 1015 Floyd Avenue, P.O. Box 842014, Richmond, VA 23284.
Recovering bivariate Paley-Wiener functions with scattered translates of the Poisson kernel.

We introduce the Poisson interpolation operator and present 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 14, 2014)

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