

# TEMPLE UNIVERSITY

Department of Mathematics

## Analysis Seminar

Room 617 Wachman Hall

Monday, November 26 2018, 2:40 p.m.

### *A Balian-Low Type Theorem for Gabor Schauder Bases*

by Sara Leshen

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**Abstract:** The Uncertainty Principle implies that a function and its Fourier transform cannot both be well-localized. The Balian-Low theorem is a form of the Uncertainty Principle for Riesz bases. In this joint work with A. Powell, we prove a new version of the Balian-Low theorem for Gabor Schauder bases generated by compactly supported functions. Moreover, we show that the classical Balian-Low theorem for Riesz bases does not hold for Schauder bases.