## **Applied Math/Analysis Seminar**



## **Guy Gilboa**

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Thursday, December 7, 2017 4:00 Refreshments-AKW, 1<sup>st</sup> Floor

4:15 Seminar (AKW 400)

## "Processing images using nonlinear transforms"

Abstract:

Recent studies of convex functionals and their related nonlinear eigenvalue problems show surprising analogies to harmonic analysis based on classical transforms (e.g. Fourier). In this talk the total-variation transform will be introduced along with some theoretical results. Applications related to image decomposition, texture processing and face fusion will be shown. Extensions to graphs and a new interpretation of gradient descent will also be discussed.