

Meeting: 1002, Pittsburgh, Pennsylvania, SS 15A, Special Session on PDE-Based Methods in Imaging and Vision

1002-94-59 **Jackie Jianhong Shen*** (jhshen@math.umn.edu), 206 Church Street, SE, School of Mathematics, UMN, Minneapolis, MN 55455, and **Haomin Zhou** and **Tony F. Chan**. *Inpainting of BV Images in the Wavelets Domain*.

It is well known that BV (bounded variation) images cannot be directly characterized by the size properties of their wavelets coefficients, as contrary to most Besov images frequently employed in wavelets denoising and compression analysis. Thus challenges arise when a BV image is encoded by wavelets representation (as in JPEG2000) but some of its wavelets components are missing due to noisy or lossy communication channels. In this talk we present our recent work on how to attack this challenging error concealment problem. It is a joint work with Professors Tony Chan at UCLA and Haomin Zhou at Georgia Institute of Technology. (Received August 16, 2004)