

1067-94-2177 **Todd Wittman*** (wittman@math.ucla.edu), 10747 Wilshire Blvd #1404, Los Angeles, CA
90024. *Image and Data Fusion*.

A visual image is often accompanied by non-visual information about the scene. For example, one may have census or poll data that fits a geographic region captured in a satellite image. A mathematical challenge is to combine the image and data in a sensible manner. I will present recent work on fusing image and event data in a variational framework. I will also show two of our current image fusion projects, one on fusing near-shore oceanographic images with bathymetry data and another on incorporating physics models into video tracking of airborne gases. (Received September 22, 2010)