

Meeting: 1001, Evanston, Illinois, SS 6A, Special Session on Nonlinear Partial Differential Equations and Applications

1001-35-385 **Donatella Danielli*** (danielli@math.purdue.edu), Department of Mathematics, Purdue University, 150 N. University St., West Lafayette, IN 47907, and **Marianne Korten**. *On the pointwise jump condition of the free boundary in the 1-phase Stefan problem*. Preliminary report.

In this talk we describe the jump (or Rankine-Hugoniot) condition at the interphase for solutions in the sense of distributions to the one phase Stefan problem. More precisely, we show that the spatial component of the normal derivative of the solution has a trace at the free boundary. (Received August 31, 2004)