

Meeting: 1000, Albuquerque, New Mexico, SS 12A, Special Session on Regularity in PDEs and Harmonic Analysis

1000-42-78 **Árpád Bényi*** (benyi@math.umass.edu), Department of Mathematics and Statistics, Lederle GRT, Amherst, MA 01003, and **Andrea Nahmod** and **Rodolfo H. Torres**. *Boundedness of bilinear pseudodifferential operators on Lebesgue and Sobolev spaces.*

We study bilinear pseudodifferential operators beyond the so called Coifman-Meyer class and aim at including those symbols that naturally arise from the nonsmooth multipliers generalizing the Bilinear Hilbert Transform when they become x -dependent. Our goal is to understand how the bilinear pseudodifferential setup differs from the linear pseudodifferential one in terms of symbolic calculus and boundedness properties on products of Lebesgue and Sobolev spaces. (Received August 16, 2004)