

1075-35-20

**Matthew D Blair\*** ([blair@math.unm.edu](mailto:blair@math.unm.edu)), Department of Mathematics and Statistics, MSC01 1115, 1 University of New Mexico, Albuquerque, NM 87110. *On Strichartz and local smoothing estimates in exterior domains.*

We consider Strichartz estimates for the Schrodinger equation in exterior domains, a family of space time integrability estimates which rely on the dispersive effects of the solution map. While such estimates are reasonably well understood in Euclidean space, less is known about how the imposition of boundary conditions impact the validity of such estimates. We will review positive results in this area, including a joint work with H. Smith and C. Sogge. Furthermore, for strictly concave domains, we will examine the role of a family of refined local smoothing estimates in establishing these inequalities. (Received July 25, 2011)