1073-35-63 **Matthew D Blair*** (blair@math.unm.edu), Department of Mathematics and Statistics, MSC01 1115, 1 University of New Mexico, Albuquerque, NM 87110. *Strichartz estimates in polygonal domains.*

Strichartz inequalities are a family of space-time integrability estimates for the wave equation that rely on the dispersive effect of the solution map. They are of interest due to their applications to nonlinear equations. These estimates are reasonably well-understood when the equation is posed over Euclidean space. However, the situation is more intricate when one starts to consider problems posed on polygonal domains. This is due to the fact that boundary conditions affect the flow of energy. Nonetheless, we will see that such inequalities are valid in this context. This is a joint work with G.A. Ford and J. Marzuola. (Received July 25, 2011)