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Jason Metcalfe* (metcalfe@email.unc.edu), Department of Mathematics, University of North Carolina, Chapel Hill, NC 27599-3250. *Abstract Strichartz estimates and the Strauss conjecture for the wave equation in exterior domains.*

This regards joint work with K. Hidano, H. Smith, C. Sogge, and Y. Zhou. First, it is shown that known local-in-time "abstract Strichartz" estimates can be combined with the corresponding global-in-time estimates for the free wave equation and some localized energy estimates to produce global-in-time estimates in exterior domains. These "abstract Strichartz" estimates include a class of weighted estimates which yield a proof of the Strauss conjecture for the wave equation in exterior domains in three and four dimensions. (Received March 03, 2009)