Strichartz Inequalities

Gilles Lebeau $^{\ast 1}$

¹Laboratoire J.-A. Dieudonne, Nice. – CNRS, UMR 7351 – France

Résumé

Strichartz inequalities first appeared in a paper by Strichartz: "Restriction of Fourier Transform to Quadratic Surfaces and Decay of Solutions of Wave Equations. Duke Math. Journal, 44, 1977". They have become a fundamental tool in the study of well posedness of the Cauchy problem for nonlinear evolution equations, such as nonlinear wave or nonlinear Schr⁵odinger equations. In harmonic analysis they are connected to L^p estimates for spectral projectors. In this talk, I will describe the validity of Strichartz Inequalities for waves inside a strictly convex domain. This is a joint work with O. Ivanovici, R. Lascar and F. Planchon.

^{*}Intervenant