ANALYSIS OF DISPERSIVE EQUATIONS

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The course is an introduction to a few techniques of harmonic analysis, advanced functional analysis and PDE theory used in the modern study of dispersive evolution equations (Schroedinger, wave, Klein Gordon, Dirac, KdV and several others). Among the applications we shall consider dispersive and Strichartz estimates, and local and global existence results for the nonlinear Schroedinger and wave equation.