TITLE : ON THE UNIQUENESS PROPERTIES OF SOLUTIONS OF NON-LINEAR DISPERSIVE EQUATIONS

ABSTRACT : We study uniqueness properties of solutions of classical nonlinear dispersive equation as the k-generalized Korteweg-de Vries and the semi-linear Schrödinger equation. Our goal is to obtain sufficient conditions on the behavior of the difference $u_1 - u_2$ of two solutions u_1, u_2 at two different times $t_0 = 0$ and $t_1 = 1$ which guarantee that $u_1 \equiv u_2$.