

PONCE Gustavo

On special regularity properties of a class of dispersive equations

This talk is concerned with special properties of solutions to the IVP for the k -generalized KdV equation $\partial_t u + \partial_x^3 u + u^k \partial_x u = 0$ on the line. We shall discuss results concerning well posedness, unique continuation and propagation of regularity, and compare them with similar results for other nonlinear dispersive models (in particular Benjamin-Ono equation). This is joint work with P. Isaza and F. Linares.