TEMPLE UNIVERSITY

Department of Mathematics

Analysis Seminar

Room 617 Wachman Hall

Monday, October 9, 2017, 2:40 p.m.

Applications of Mizohata type vector fields to solutions of first order nonlinear PDE's, II

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Abstract: This is a continuation of last week's talk. The goal of this talk is twofold. Firstly, we will recall the notion of `quasi ℓ Mizohata vector fields` first introduced by L. Nunes and R. dos Santos Filho (UFSCar) and show that it can be written normal form which is very special when we are in $\mathbb{R}^2$.

Secondly, we will establish a connection of these quasi ℓ Mizohata vector fields with recent results by Z. Adwan and S. Berhanu on the solutions of first order nonlinear PDE's and extend them to the classes of ultradifferentiable functions.

This is a joint work with R. Medrado from Universidade Federal do Ceará.