1163-13-620   **Daniel Duarte** and **Luis Núñez-Betancourt*** (`luisnub@cimat.mx`), Guanajutao, Mexico.
       Nash blowups in prime characteristic.

The Nash blowup is a natural modification of algebraic varieties that replace singular points by limits of certain vector spaces associated to the variety at non-singular points. For several decades, It has been studied whether it is possible to resolve singularities of algebraic varieties by iterating Nash blowups. This problem has mostly been treated in characteristic zero due to an example given by Nobile. In this talk, we will discuss a new approach in prime characteristic using differential operators. This work is inspired by a characterization of strongly F-regular rings via differential operators done by Karen E. Smith. (Received September 10, 2020)