

Department of Mathematics, BGU

Colloquium

On Tuesday, November ,12 2019

At 14:30 – 15:30

In Math 101-

GERT-MARTIN GREUEL (Technische Universitat Kaiserslautern)

will talk about

Classification of Singularities in positive characteristic

Abstract: The classification of hypersurface singularities aims at writing down a normal form of the defining power series with respect to some equivalence relation, and to give list of normal forms for a distinguished class of singularities. Arnold's famous ADE-classification of singularities over the complex numbers had an enormous influence on singularity theory and beyond. I will report on some of the impact of his work to other disciplines and to some real-life applications of the classification. Stimulated by Arnold's work, the classification has been carried on to singularities over fields of positive characteristic, partly with surprising differences. I will report on recent results about this classification and about related problems.