## **F-singularities in families**

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F-singularities are classes of singularities defined by the behavior Frobenius. A prominent tool for measuing these singularities is the test ideal, a characteristic p > 0 analog of the multiplier ideal. Recently, there has been interest in applying the methods of F-singularities to a number of geometric problems in positive characteristic. However, one gap in the theory has been the behavior of F-singularities in families. For example restriction theorems for test ideals have been lacking. In this talk, I will discuss recent joint work with Zsolt Patakfalvi and Wenliang Zhang on the behavior of F-singularities and test ideals in families. For example, we will obtain generic (and non-generic) restrictions theorems for test ideals. Some global geometric consequences will also be discussed if there is sufficient time.