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Essential dimension of gerbes over complete local rings

Essential dimension is a notion invented by Joe Buhler and Zinovy Reichstein to measure the number of parameters required to define an algbraic object. In my talk, I'll define the essential dimension of a stack and state a "genericity theorem" which computes the essential dimension of a smooth Deligne–Mumford stack as the sum of the essential dimension over the generic point in the course moduli space and the dimension of the course moduli space. I'll give a more precise theorem that holds when the stack is a gerbe over a complete local ring.

This is joint work with Zinovy Reichstein and Angelo Vistoli.