Antonella Grassi, BGMS Organizer

February 9, 2019

University of Pennsylvania, Department of Mathematics (Secondary Department of Physics)
1. Topology, geometry of algebraic varieties:

   Properties of singularities of the LMM program AND properties of singularities for String Theory; Local, Global, AND Local to Global Principles
   Applications: "Calabi-Yau" varieties, fibrations by elliptic curves

2. "Noether-Lefschtez" problems; Toric geometry (and beyond), combinatorics
   Rationality, GW, positive real polynomials, Hilbert 17th...
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