

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

A-HYPERGEOMETRIC SYSTEMS AND RELATIVE COHOMOLOGY

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April 10, 2019, 4:00 – 5:00pm
Math/Computer Science, Room 148
111 Cummington Street, Boston

Tea: 3:45pm in Room 144

Abstract: The A-hypergeometric system, which was defined and studied by Gelfand, Kapranov, and Zelevinskii, arises naturally in the study of the moduli theory of Calabi–Yau hypersurfaces and complete intersections in toric varieties. In the case of Calabi–Yau hypersurface, when the ambient toric variety is smooth and Fano, Huang–Lian–Yau–Zhu gave a complete description of the solution space to such a system in term of chain integrals. We generalize their results by relaxing both smoothness assumptions and the Calabi–Yau conditions. In this talk, I will give a brief introduction to A-hypergeometric systems and discuss the proof. This is a joint work with Dingxin Zhang.

See <http://math.bu.edu/research/geom/seminar.html> or contact Yoosik Kim (yoosik@bu.edu) or Siu-Cheong Lau (lau@math.bu.edu) for more information.