
Speaker: Chi Li
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Tuesday, April 5, 2016
11:00 AM
258 Hurley Hall

Title: deFernex-Ein-Mustata (dFEM) type inequalities for klt singularities

Abstract:

In 2002, deFernex-Ein-Mustata proved an inequality, relating the integrable exponent and the multiplicity of any ideal supported at a closed point on (smooth) C^n . This inequality has important applications to birational algebraic geometry and has deep connections to various inequalities in complex analysis. I will show that there is a dFEM type inequality on any \mathbb{Q} -Gorenstein klt singularity. I will explain how this is related to the normalized volumes of valuations and Kahler-Einstein metrics. Part of this work is based on joint works with Yuchen Liu and Chenyang Xu.