COLLAPSING OF K3 SURFACES AND SPECIAL KÄHLER STRUCTURES

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Time:Mon, Mar.17th, 16:00-17:00
Venue: Room 102, SCMS

Abstract: We consider the GH compacitification of hyperkahler metric on K3. I will show that these 2-dimensional collapsing limits are endowed with integral singular special Kähler structures (SKS) on P1, confirming a conjecture of Sun-Zhang. and each such metric space come from a Jacobian elliptic K3 surface, thus is a GH limit space of hyperkahler K3. Moreover, there's a natrual map F maps Jacobian elliptic K3 to the 2-dimensional collapsing space, we will show that F is almost injective and finite to one except in the Kummer surface case.