

SCMS Seminar



ON THE FANO VISITOR PROBLEM

Prof. Young-Hoon Kiem

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Time: 2:00-3:00 pm., Thursday, August 27, 2015

Venue: Room 2201, East Main Guanghua Tower, Handan Campus

Title: On the Fano Visitor Problem

Abstract: One basic problem in algebraic geometry is to study how a variety can be embedded in other varieties. In 2011, Bondal categorified the embedding problem and raised the following question: Let Y be a smooth projective variety. Is there a Fano variety X equipped with a fully faithful embedding of the derived category of Y into that of X ? If there is such an X , then Y is called a Fano visitor and X a Fano host of Y . In this talk, I will talk about a joint work with In-Kyun Kim, Hwayoung Lee and Kyoung-Seog Lee in which we proved that every complete intersection is a Fano visitor. I may also talk about a Hodge-theoretic criterion for the existence of a Fano host and discuss related questions.