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On the Fano visitor problem

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.

Question. (Fano visitor problem) 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.