

An Introduction to higher dimensional spaces and the Laboratory of Birational Geometry

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Abstract

The goal of the Science Vanguard Research Project “Geometry and geography of higher dimensional spaces—theory, singularity, and application” is to investigate higher dimensional algebraic geometry, focusing on theory of singularities and their application. Unlike the usual personal project, we consider the purpose of this Vanguard Project as two-folds: on one hand, we aim to foster frontier research; and on the other hand, we aim to build up a research team at the international level. To this end, we built up a research team called “Laboratory of Birational Geometry”.

In this talk, we are going to introduce the following aspects.

- The research work of the PI
- The organization of the research team.
- The research work of the team members.