

Degeneration of Kahler–Einstein manifolds

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Abstract

In this talk, we will explore the relation between the algebraic canonical degeneration of family of algebraic manifolds and the convergence of the corresponding family of Kahler–Einstein manifolds in sense of Cheeger–Gromov. As application, we will discuss the convergence and degeneration of complete Kahler–Einstein hypersurfaces in multi-dimension complex tori. We will also discuss geometric representation of vanishing cycles of degeneration as “minimal submanifolds”.