

MINIMAL MODEL PROGRAM AND THE ABUNDANCE CONJECTURE

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The minimal model program (MMP) is a theory, proven in dimensions ≤ 3 and conjectural in higher dimensions, that plays a fundamental role in the birational classification of complex algebraic varieties. Roughly speaking, MMP could be described as an algorithm whose aim is to determine in each birational equivalence class of varieties a representative which is “as simple as possible”. In the talk, first we will present this algorithm in a rather general form and subsequently we will discuss about the abundance conjecture, one of the main open problems in MMP.