Techniques of multiplier ideal sheaves and their applicaitons to algebraic geometry

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Abstract: Will discuss the techniques of multiplier ideal sheaves to algebraic geometric problems, such as the Fujita conjecture, deformational invariance of plurigenera, and the analytic proof of the finite generation of the canonical ring. Will also discuss the application of algebraic geometric techniques to regularity problems of partial differential equations by using the method of multiplier ideal sheaves.