

## Algebraic Geometry Seminar

### *Pushforwards of pluricanonical bundles and morphisms to abelian varieties*

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**Abstract:** In the past few years, people working on the analytic side of algebraic geometry have obtained two important new results: a version of the Ohsawa-Takegoshi extension theorem with sharp estimates (Blocki, Guan-Zhou), and the existence of canonical singular hermitian metrics on pushforwards of relative pluricanonical bundles (Berndtsson, Paun, Takayama, and others). In this talk, I will explore some consequences of this work for the study of morphisms to complex abelian varieties, including the recent proof of Iitaka's conjecture over abelian varieties (Cao-Paun). The talk will be understandable without any background in analysis.

Wednesday, November 30 at 3:00 PM in SEO 1227