

## CASTS Seminar in Algebraic Geometry

*Extension of holomorphic sections from subvarieties via the method of L<sup>2</sup>-estimate (I)*

Prof. Chen-Yu Chi

2018 - 07 - 17 (Tue.)

10:00 - 11:30

103, Mathematics Research Center Building (ori. New Math. Bldg.)

---

In this series of talks, we will first introduce Hörmander's theory of solving linear differential equations of first order on Kähler manifolds with an emphasis, due to Demailly, on the case where a complete metric exists. Then we will discuss extension theorems of Ohsawa-Takegoshi type following the general framework due to Guan and Zhou.

Reference:

- [1] Demailly's online book Complex Analytic and Differential Geometry, Chapter VIII
- [2] Demailly, Analytic Methods in Algebraic Geometry, Chapter 12
- [3] Q. Guan and X. Zhou, A solution of an L<sup>2</sup> extension problem with an optimal estimate and applications, *Annals of Mathematics* 181 (2015), 1139-1208

