
ALBERT CHAU, University of British Columbia

Cusp like solutions to Kahler Ricci flow

In this talk I will discuss the existence of cusp-like solutions $g(t)$ to the Kähler Ricci flow on quasi projective varieties M (in other words, $M = N \setminus D$ for a compact complex manifold N with divisor D). A Kähler metric g is called cusp-like on M if it is equivalent to the standard hyperbolic punctured disc model in complex directions approaching D . The discussion will include complete solutions to the flow on M emerging from complete initial metrics with unbounded curvature, and also complete solutions to the flow on M emerging from smooth initial metrics on N (thus becoming “instantaneously complete” on M). The talk will be based on joint work with Ka Fai Li and Liangming Shen.