

The Hong Kong University of Science and Technology

Department of Mathematics

MPhil THESIS EXAMINATION

On the Ricci curvature of Kähler-Ricci Flow

By

Mr. Cheuk Yan FUNG

<u>ABSTRACT</u>

In this thesis, we consider n-dimensional compact Kähler manifold X with semi-ample canonical line bundle. We investigate the bound of Ricci curvature of X along the long time solution of Kähler Ricci Flow. In particular, when the fibres of X over the canonical model X_{can} of X are biholomorphic to each other and the Kodaira dimension is one, the Ricci curvature of X converges to the negative of a generalized Kähler-Einstein metric X_B locally away from the singular set of X in $C_{loc}^0(\omega(t))$ topology.

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(Open to all faculty and students)

The student's thesis is now being displayed on the reception counter in the General Administration Office (Room 3461).