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**Teng Fei\*** ([teng.fei@rutgers.edu](mailto:teng.fei@rutgers.edu)), Smith Hall, 101 Warren St., Newark, NJ 07102. *Recent progress in Anomaly flow.*

The Hull-Strominger system describes the geometry of compactifications of heterotic superstrings with flux, which can be viewed as a generalization of Ricci-flat Kähler metrics on non-Kähler Calabi-Yau manifolds. To overcome the difficulty of lacking  $\partial\bar{\partial}$ -lemma, Phong-Picard-Zhang initiated the program of Anomaly flow to understand the Hull-Strominger system. It has been proved in many cases that the Anomaly flow serves as an effective way to investigate the Hull-Strominger system and in general canonical metrics on complex manifolds, such as giving new proofs of the Calabi-Yau theorem and the existence of Fu-Yau solution. In this talk, we present some new progress on the Anomaly flow, including the behavior of Anomaly flow on generalized Calabi-Gray manifolds and a unification of the Anomaly flow with vanishing slope parameter and the Kähler-Ricci flow, which further allows us to generalize the notion of the Anomaly flow to arbitrary complex manifolds. This talk is based on joint work with Z.-J. Huang, D.H. Phong and S. Picard. (Received August 27, 2019)