Finite time collapsing of the Kähler-Ricci flow on threefolds

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Abstract. We show that if on a compact Kähler threefold there is a solution of the Kähler-Ricci flow which has finite time collapsing, then the manifold admits a Fano fibration. Furthermore, if there is finite time extinction then the manifold is Fano and the initial class is a positive multiple of the first Chern class.

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