

On the balanced condition for the Eguchi-Hanson and the Simanca metrics

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Abstract

An interesting open question in Kähler geometry is the characterization of projectively induced Kähler metrics. An important class of projectively induced Kähler metrics are the so called *balanced metrics* in the sense of Donaldson S. In this talk, after a briefly introduction of balanced metrics, we see the blowing-up operation and we introduce two important complete Kähler metrics defined on the blow-up of \mathbb{C}^2 at the origin: the celebrated *Simanca metric* and the *Eguchi-Hanson metric*. Afterward we discuss on the balanced condition for these two Kähler metrics.

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