

Blowup up solutions of Toda systems

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Abstract:

Toda system is a system of two dimensional elliptic equations with exponential non-linearity. It is well known that the study of Toda systems is important not only to Chern-Simons models in Physics, but also to the understanding of various topics in Algebraic Geometry. One major goal in the study of Toda system on Riemann surfaces is to completely understand the asymptotic behavior of fully bubbling solutions. In this talk I will report a recent joint work with Juncheng Wei and Chang-shou Lin that describes the fully bubbling solutions in the sharp form.