

Title: Conformal limits of solutions to Hitchin's equations.

Abstract: Let G be a complex simple Lie group. G -opers are flat G -connections over a compact Riemann surface, which can be thought of as global versions of the locally defined second order Schrödinger operators. Another family of flat G -connections comes from solutions to the Hitchin equations. The physicist Davide Gaiotto conjectured that a conformal limit of connections in the second family exists and it lies in the space of opers. We shall discuss a proof of this result.

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