

Szilárd Szabó

Title: Asymptotic analysis of non-abelian Hodge theory in rank 2

Abstract: First I explain how recent results on the asymptotic solutions of Hitchin's equations on a curve allow one to prove Simpson's Geometric $P = W$ conjecture for the 4-punctured sphere in rank 2. In the second part of the talk I outline the main ideas of my ongoing work on the extension of this result to the case of the 5-punctured sphere.