

Seminarium Studium Doktoranckiego NCBJ

Thursday, 5 March, 9:00

Sala 404 w NCBJ, Pasteura 7

Speaker:

Andrea Bevilacqua (Studium Doktoranckie NCBJ)

Title:

On Chern Simons invariant of 3-manifolds

Abstract:

In this presentation, we will give a brief introduction to the Chern-Simons (CS) theory and in particular to some intriguing features related to the calculation of invariants of 3-manifolds.

We will concentrate on a particularly interesting point, represented by the existence of non-equivalent classical limits of a quantum theory in the context of the Rogers dilogarithm.

After a brief introduction to the formalism and the involved quantity, we will proceed to an example of calculation of the CS invariant for a particular 3-manifold. We will then comment on the result, briefly explaining how to obtain a quantized version of it. Finally, we will conclude with a brief discussion of the classical limit.