

GEOMETRY & PHYSICS SEMINAR

28 março | 11:00 | sala 6.2.33

The quantum Witten-Kontsevich series

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Abstract:

In 1991, Witten conjectured a relation between the moduli space of curves and the KdV hierarchy via the so-called Witten-Kontsevich series. This conjecture was proved in 1992 by Kontsevich. The first goal of the talk is to clearly present this statement.

Then, I will explain how the recent developments of the Double Ramification hierarchies allow to define a quantum version of the Witten-Kontsevich series. I will finish by explaining a surprising connection between coefficients of the quantum Witten-Kontsevich series and Hurwitz theory.

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