

Seminar: "Geometry&Physics@DFT"

Location: seminar room DFT (IFIN-HH),
(<http://events.theory.nipne.ro/gap/index.php/seminar>)

Date: Friday, November 15, 2013, 12 am

Title: **Chern-Simons invariants and Teichmuller space**

Speaker: **Dr. Sergiu MOROIANU**

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Abstract: We study the Chern-Simons invariant of infinite volume hyperbolic three manifolds of finite geometry (especially of convex co-compact quotients of H^3) as a function on their deformation space which is the Teichmuller space of the conformal boundary. We show that the Chern-Simons invariant is a holomorphic section of a Hermitian line bundle over Teichmuller space. This implies that the renormalized volume of these 3-manifolds is a Kahler potential for the Weil-Petersson Kahler metric. This is a joint work with C. Guillarmou."