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*Calculating classes on the moduli of curves*



Jeudi 21  
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17h00-18h00  
Jussieu, 15-25-  
salle 502

Many modern geometric constructions yield natural classes on the moduli space of curves. How can we compute these classes? The genus 0 cases are the simplest and are often governed by essentially closed formulas. To make the jump from genus 0 to higher genus, a new route via the study of semisimple Cohomological Field Theories (CohFTs) and the Givental-Teleman classification can be used. I will discuss how the CohFT results lead to complete calculations in several cases (related to  $r$ -spin curves, Verlinde bundles, and Gromov-Witten theories). The talk represents joint work with several authors: F. Janda, A. Marian, D. Oprea, A. Pixton, H.-H. Tseng, and D. Zvonkine.