

Exposé du jeudi 28 janvier 2010

**SOME COHOMOLOGY CALCULATIONS OF MODULI SPACES OF HIGGS
BUNDLES AND RELATED SPACES.**

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Résumé : Most of the talk is a report on a joint work with L. Alvarez-Consul, M. Logares and O. Garcia-Prada and A. Schmitt. Hitchin gave a strategy to compute the cohomology of the moduli space of Higgs-bundles, using the C^* action on the moduli space. This strategy has only been completed in very few cases. We would like to explain our approach to this strategy. Our approach differs from previous computations in two respects. First, our computations are done in the Grothendieck ring of varieties. Also we replace arguments using a variation of stability parameters by computations for the underlying algebraic stacks, without stability conditions. In the cases that were previously known, this seems to shorten the computations and allows us to do some new computations.

¹Les jeudis matin, de 10 h 30 à 11 h 30, salle 004, IRMAR (bâtiment 22), Université de Rennes 1, Campus de Beaulieu