Séminaire d'algèbre, topologie et géométrie
Jeudi 23 juin à 14h
Salle de conférences

Indranil Biswas

TIFR Bombay

Comparison of Poisson structures on moduli spaces

Let X be a complex irreducible smooth projective curve, and let L be an algebraic line bundle on X with a nonzero section σ. Let N denote the moduli space of stable Hitchin pairs (E, θ), where E is an algebraic vector bundle on X of fixed rank r and degree δ, and $\theta \in H^0(X, End(E) \otimes K_X \otimes L)$. Associating to every stable Hitchin pair its spectral data, an isomorphism of N with a moduli space M of stable sheaves of pure dimension one on the total space of $K_X \otimes L$ is obtained. Both the moduli spaces M and N are equipped with algebraic Poisson structures, which are constructed using σ. We prove that the above isomorphism between M and N preserves the Poisson structures. This is done together with Francesco Bottacin and Tomas Gomez.