# Séminaire d'algèbre, géométrie et topologie
## Jeudi 17 décembre à 14h
## Salle I

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## *Gel'fand-Cetlin revisited*

In 1950 Gel'fand and Cetlin constructed the first example of what we now call canonical bases for the representations of a semi-simple Lie algebra. Much later Guillemin and Sternberg showed how these could be understood as arising out of the geometric quantization of flag varieties or co-adjoint orbits in various polarisations, relying on a (real) integrable system that is closely related to toric degenerations of these flag varieties. We shall outline this story, and then indicate how this symplectic story generalises using contractions of Hamiltonian spaces. Finally, we will indicate how this may be related to geometric quantisation of moduli spaces of bundles in real polarisations via toric degenerations.
This is based on joint work with Joachim Hilgert and Chis Manon.