



COLLOQUIUM DE L'IMJ-PRG

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*How (and why) to measure the
volume of a representation*



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17h00-18h00
Université de Paris,
Bâtiment Sophie Germain,
salle 1016 (1^{er} étage)

Representation theory studies symmetries of linear algebraic objects; it has been connected to geometry from its inception, since symmetries of a geometric space X produce symmetries of the linear space of functions on X . However, less direct, «hidden» connections of representations to geometry have lately been playing an increasingly important role in the subject. I will talk about some such connections, describing examples where irreducible representations can be counted by counting Betti numbers of a (surprisingly) relevant space, while their structure can be (partly conjecturally) related to geometry of Lagrangian subvarieties in (an even more surprisingly) relevant symplectic manifold.