

---

**JERRY KAMINKER**, IUPUI and UC Davis

*Matrix integrals and von Neumann algebras of compact groups*

We will discuss matrix integrals on the von Neumann algebra of a compact Lie group. The integrals of certain functions have expansions with terms labeled by Riemann surfaces,  $\Sigma$ . The coefficients are essentially the volumes of the moduli spaces,  $\text{hom}(\pi_1(\Sigma), G)/G$ . We will also consider how one could use these methods to obtain certain intersection numbers on these moduli spaces.

This is joint work with Motohico Mulase.