

Loop groups and Chern-Simons theory

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Abstract

- Lecture 1. Review of conformal blocks, modular functors and relation to Chern-Simons from the point of view of algebraic geometry, loop groups and moduli of bundles
- Lecture 2. Gauge theory in 2d, the Verlinde dimensions (Chern-Simons reduced along a circle) and twisted K-theory
- Lecture 3. Chern-Simons as an extended TQFT. Anomalies, invertible TQFTs and relation to conformal nets.