2022 Winter School in Mathematical Physics



Contribution ID: 2 Type: not specified

Sid Maibach (Bonn) - Real Valued 1D Genus 0 Modular Functors for the Weyl anomaly

Wednesday 12 January 2022 09:25 (25 minutes)

I will introduce the real determinant line bundle which characterizes the Weyl anomaly as a real-valued onedimensional modular functor over the genus 0 moduli space of Riemann surfaces with analytically parametrized boundaries.

A universal property of such modular functors is obtained by studying the corresponding central extensions of the group of analytical circle diffeomorphisms. In particular, a cocycle using rotation numbers does not appear and hence the central extension is the Virasoro-Bott group or trivial.

Session Classification: Short talks