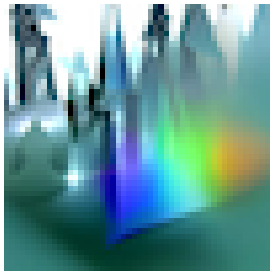

Contribution ID: **3** Type: **not specified**

Spectral and metric aspects of the Dolbeault-Dirac spectral triple on quantum SO(5)/(SO(2)xSO(3)

Friday 30 September 2022 13:35 (25 minutes)

The Berstein-Gelfand-Gelfand resolution for irreducible quantum flag manifolds gives an algebraic description of the Dolbeault complex of (anti-)holomorphic k-forms by actions of quantum tangent space. Requiring equivariance and compatibility with the real form of the quantum enveloping algebra, there is an essentially unique hermitian metric on the (0,k)-forms given by the Haar state. Using equivariance, spectral computations can be reduced to determining the eigenvalues of the Laplace operator on 1-dimensional highest weight spaces.

Presenter: WAGNER, Elmar

Session Classification: 30-morning