Boundary conditions for hypoelliptic Laplacians

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In this talk I will present natural boundary conditions for Bismut's hypoelliptic Laplacian, which generalize Dirichlet and Neumann boundary conditions for the usual Hodge Laplacian. Associated boundary conditions will be given for the differential and Bismut codifferential. Finally the commutation between the resolvent of the hypoelliptic Laplacian and the differential for those boundary conditions will be explained.

Joint work with Shu Shen