Maximal hypoellipticity for Geometric Kramers-Fokker-Planck operators

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Lebeau first showed that a Kramers-Fokker-Planck geometric operator admits a maximal subelliptic estimate with a regularity gain of 2/3. His proof relies on Fourier integral operators, which are not well-suited for manifolds with boundaries. For this reason, we reconsider this proof using a local approach, which consists of localizing the operator in charts and comparing it to the Euclidean case.