

We study some simple models for Kramers–Fokker–Planck operators, in particular the hypoelliptic Laplacian on the circle. Our goal is compare the definition of the semigroup via eigenfunction expansion with the maximal holomorphic extension of the semigroup, and in particular to show that the half-plane of complex times where the expansion converges absolutely is the maximal half-plane on which the semigroup can be defined. Joint work with B. Mityagin and P. Siegl.