

# MAXIMAL REGULARITY FOR KOLMOGOROV OPERATORS IN $L^2$ SPACES WITH RESPECT TO INVARIANT MEASURES

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ABSTRACT. We prove an optimal embedding result for the domains of Kolmogorov (or degenerate hypoelliptic Ornstein–Uhlenbeck) operators in  $L^2$  spaces with respect to invariant measures. We use an interpolation method together with optimal  $L^2$  estimates for the space derivatives of  $T(t)f$  near  $t = 0$ , where  $T(t)$  is the Ornstein–Uhlenbeck semigroup and  $f$  is any function in  $L^2$ .