GAUSSIAN ESTIMATES FOR SCHRÖDINGER PERTURBATIONS

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We propose a new general method of estimating Schrödinger perturbations of transition densities using an auxiliary transition density as a majorant of the perturbation series. We present applications to Gaussian bounds by proving an optimal inequality involving four Gaussian kernels, which we call 4G Theorem. The applications come with precise control of constants in estimates of Schrödinger perturbations of Gaussian-type heat kernels and also allow for specific non-Kato perturbations.

References

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