# Numerical Solutions for Partial Differential Equations via Simulated Annealing

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We propose a numerical method to solve the partial differential equations, in particular, Laplace Equation, Heat Equation (Diffusion), Black and Scholes and Fisher-KPP Equation. The method uses finite differences to express the equation as an optimization problem that can be solved via Simulated Annealing. The numerical results obtained by the proposed method are quite satisfactory for a wide range of specific cases. The method converges for almost all cases, moreover, the method is relatively easy to implement and generates reasonably accurate approximations.

## References

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