A New Stencil Selection Algorithm for RBF-FD Methods to Solve Poisson Equation

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Abstract: In this talk, we present a new stencil selection algorithm used in RBF-FD (Radial Basis Function-generated Finite Difference) methods for solving Poisson equation in 2D. Our experiments show that this new algorithm helps to get more accurate approximate solutions and to decrease the computational cost in comparison to other known stencil selection algorithms.

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