

High-Performance Implementation of Multigrid Solver for Lattice QCD

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We have independently implemented a multigrid solver for propagator calculation for Lattice QCD. Compared to existing implementations from abroad, this project features a flatter structure and lower complexity, while offering greater autonomy and control. At the current stage, performance in common application scenarios is approaching the level of advanced international implementations, with the potential for further performance enhancements and the addition of unique features. The project is hosted at “<https://github.com/ZhangXin8069/PyQCU>”.

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