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Iterative reconstruction algorithms for solving the Schrödinger equations on conical spaces. (English) Zbl 1481.35146

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Summary: We consider a system of Schrödinger equations on conical spaces. We first rewrite the iterative reconstruction algorithms for two kinds of average Schrödinger functionals and prove their convergence. Then the asymptotic pointwise error estimates are presented for both algorithms under the case that the average samples are corrupted by noise.

MSC:

35J10 Schrödinger operator, Schrödinger equation
35J47 Second-order elliptic systems
35J61 Semilinear elliptic equations

Keywords:

system of Schrödinger equations; iterative reconstruction algorithms

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