

Takeuchi, Tomoya; Yamamoto, Masahiro

Tikhonov regularization by a reproducing kernel Hilbert space for the Cauchy problem for an elliptic equation. (English) [Zbl 1185.65173](#)

SIAM J. Sci. Comput. 31, No. 1, 112-142 (2008).

MSC:

- 65M30 Numerical methods for ill-posed problems for initial value and initial-boundary value problems involving PDEs
- 35J25 Boundary value problems for second-order elliptic equations
- 46E22 Hilbert spaces with reproducing kernels (= (proper) functional Hilbert spaces, including de Branges-Rovnyak and other structured spaces)
- 65M12 Stability and convergence of numerical methods for initial value and initial-boundary value problems involving PDEs

Cited in 14 Documents

Keywords:

Tikhonov regularization; Cauchy problem; reproducing kernel Hilbert space; ill-posed problem; stability; elliptic equation; convergence; numerical results

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