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**The one-phase fractional Stefan problem.** (English) Zbl 1473.80010

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**MSC:**

- 80A22 Stefan problems, phase changes, etc.
- 35D30 Weak solutions to PDEs
- 35K15 Initial value problems for second-order parabolic equations
- 35K65 Degenerate parabolic equations
- 35R09 Integro-partial differential equations
- 35R11 Fractional partial differential equations
- 65M06 Finite difference methods for initial value and initial-boundary value problems involving PDEs
- 65M12 Stability and convergence of numerical methods for initial value and initial-boundary value problems involving PDEs

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**Keywords:**

Stefan problem; phase transition; long-range interactions; free boundaries; nonlinear and nonlocal equation; fractional diffusion

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