A self-similar solution to time-fractional Stefan problem

Adam Kubica[1] and Katarzyna Ryszewska[1]

[1]Warsaw University of Technology

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Abstract

We derive the fractional version of one-phase one-dimensional Stefan model. We assume that the diffusive flux is given by the time-fractional Riemann-Liouville derivative, i.e. we impose the memory effect in the examined model. Furthermore, we find a special solution to this problem.

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