1093-35-54   **Seung Hyun Kim*** (`skim2014@csw.org`), 45 Georgian Road, Weston, MA 02493. *An effective transform method for the computation of the free boundary in an one-phase Stefan problem.* Preliminary report.

In this paper, we present an effective computation method for the free boundary in an one-phase Stefan problem by changing the curvy domain to a rectangular domain. The numerical result obtained by our method with a quadratic equation for the free boundary is compared with the exact solution. With the same method, we suggest the solution for a nonlinear Stefan problem. (Received July 21, 2013)