

**ASYMPTOTIC CALCULATION OF THE HEAT
DISTRIBUTION ON A PLANE**

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S. V. Zakharov

For the heat equation on a plane an asymptotic approximation of the solution of the Cauchy problem for large times is constructed in the case when the initial function at infinity has a power-like asymptotics. Investigation of the asymptotic behavior of the solution of the problem under consideration in addition to direct application to processes of heat conduction and diffusion has an independent interest for asymptotic analysis.

Keywords: heat equation, Cauchy problem, asymptotics.

S. V. Zakharov, Cand. Sci. (Phys.-Math.), Krasovskii Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences, Yekaterinburg, 620990 Russia, e-mail: svz@imm.uran.ru.

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