Vol. 21 No. 1

## ON LEBESGUE CONSTANTS OF LOCAL PARABOLIC SPLINES

## E. V. Strelkova, V. T Shevaldin

## Received August 12, 2014

Lebesgue constants (the norms of linear operators from C to C) are calculated exactly for local parabolic splines with an arbitrary arrangement of knots, which were constructed by the second author in 2005, and for N.P. Korneichuk's local parabolic splines, which are exact on quadratic functions. Both constants are smaller than the constants for interpolation parabolic splines.

Keywords: Lebesgue constants, local parabolic splines, arbitrary knots.

**E. V. Strelkova** Cand. Phys.-Math. Sci., Krasovskii Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences, Yekaterinburg, 620990 Russia.

**V. T Shevaldin** Dr. Phys.-Math. Sci., Krasovskii Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences, Yekaterinburg, 620990 Russia, e-mail: Valerii.Shevaldin@imm.uran.ru.

Cite this article as:

E. V. Strelkova, V. T Shevaldin, On Lebesgue constants of local parabolic splines, *Tr. Inst. Mat. Mekh. UrO RAN*, 2015, vol. 21, no. 1, pp. 213–219.