

**LOCAL APPROXIMATION BY SPLINES WITH
DISPLACEMENT OF NODES**

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We consider the problem of approximating a function defined on a uniform mesh by the method of local polynomial spline-approximation where the mesh of the nodes of the spline is chosen displaced relative to the mesh of the initial data. Conditions are established for the local form preservation by the spline of the initial data. We study the approximative properties of the method for the case of the simplest local approximation formula and find the optimal values of the displacement parameters.

Key words and phrases: local spline-approximation, displaced data, Schoenberg approximation.

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Received

March 9, 2011

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Translated into English:

Siberian Advances in Mathematics, V. 23, N 1, 69–75 (2013).