ASYMPTOTIC ANALYSIS OF BOUNDARY CONDITIONS FOR QUINTIC SPLINES

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In this article, we consider various boundary conditions for interpolation of quintic splines of defect 1 on a uniform mesh. We obtain an asymptotic representation of the approximation error for the spline for different boundary conditions. Boundary conditions that are optimal by approximation accuracy are found.

Key words and phrases: quintic spline, spline-interpolation, boundary conditions.

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