Extrapolation of Cubic Splines in General with Multiple Knots

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Abstract

In this paper we consider certain cubic pp functions which satisfy a less stringent discrete extrapolating condition $s_i(x_i+\j h) = s_{i+1}(x_i+\j h)$, $i = 1,2,\ldots,n-1$ for $\j = -1,0,1$ and are therefore less restrictive than the discrete cubic splines. The existence and uniqueness of periodic extrapolated cubic splines with multiple knots which interpolate to a given functions at more general points interior to each given mesh interval had been investigated.

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Index Terms

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Keywords

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