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MODIFIED ADAPTIVE NYSTRÖM METHOD

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Abstract

Nyström method is conditionally stable as the extraneous root lie on the unit circle. The method is stabilized with the help of adaptive technique. The additional parameter is introduced to retain the order of the method. The adaptive method is proved to be superior to Nyström method as well as Adams Bashforth method. Third order method is analyzed and discussed with complete details. The results are compared with Adams Bashforth and Nyström method.

Key Words : *Nyström method, Adams Bashforth method, Stable, Characteristic equation.*

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