عنوان مقاله:

Variational Approach of Marangoni Mixed Convection Boundary Layer Flow with Pade Technique

محل انتشار:

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خلاصه مقاله:

In this paper, Variational Iteration method with combining Pade approximation (Modified Variational Iteration Method-MVIM) is performed to Marangoni convection flow over the surface with buoyancy effects which is occurred gravity and external pressure. After the appropriate transformation of equations, we get the dimensionless form to solve numerically with modified variational iteration method. We compare the our results with well-known asymptotic expansion method used by Zhang Yan and Zheng Liancun and also compare with Fourth order Runge Kutta solution which are presented in tables. Very efficient and accurate results are obtained with presented method.

کلمات کلیدی:

Variational iteration method, Marangoni convection, Pade approximation, Boundary layer flow