

عنوان مقاله:

Jeffery Hamel Flow of a non-Newtonian Fluid

محل انتشار:

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خلاصه مقاله:

ransform is applied to reduce governing nonlinear partial differential equations to a much simpler ordinary differential equation. Variation of Parameters Method (VPM) is then employed to solve resulting equation. Same problem is solved numerical by using Runge-Kutta order 4 method. A comparison between both the solutions iscarried out to check the efficiency of VPM. Effects of emerging parameters are demonstrated both for diverging and converging channels using graphical simulation

كلمات كليدى:

Hamel flow; Casson fluid; Variation of Parameters Method (VPM); converging and diverging channels; Runge-Kutta order 4 method

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