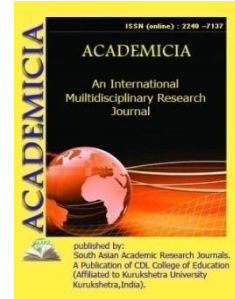




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## COMPARISON OF THE TURBULENCE MODEL FOR SWIRLED FLOWS

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### ABSTRACT

*The article examines the turbulent flow of a fluid flow in a rotating pipe, which is called the Poiseuille-Couette-Taylor flow. The main approaches to the numerical simulation of turbulent flows in the annular region between rotating cylinders are considered. The calculated results are obtained, which correlate with the known experimental results. On the basis of a comparative analysis, the most suitable differential turbulence model is proposed for calculating the conjugate problems of hydrodynamics and heat transfer in a Poiseuille-Couette-Taylor flow.*

**KEYWORDS:** *Mathematical Model Of Turbulence Based On The Dynamics Of Two Fluids, SSG / LRR-RSM-W2012 Model, Swirling Flow.*

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