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SOLVABILITY OF THE STATIONARY MATHEMATICAL MODEL OF A NON-NEWTONIAN FLUID MOTION WITH OBJECTIVE DERIVATIVE

ANDREY ZVYAGIN

Research Institute of Mathematics, Voronezh State University
394006, Voronezh, Russian Federation
E-mail: zvyagin.a@mail.ru

Abstract. Leray–Schauder topological degree theory and approximation-topological approach are used to the boundary value problem for a system of equations that describes the stationary mathematical model of weak aqueous polymer solutions motion with the smoothed Jaumann's derivative. Solvability of this problem in a weak sense is studied.
Key Words and Phrases: Non-Newtonian fluid, solvability in a weak sense, approximation problem, existence theorem, Leray-Schauder degree theory for completely continuous vector fields.
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