BRANCHING SOLUTIONS OF NONLINEAR DIFFERENTIAL EQUATION IN THE PROBLEM OF MARGENIC INSULATION

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The parametric families of small branching solutions of nonlinear differential equations of order n in the neighborhood of branching point are constructed. The methods of analytical theory of branching solutions of nonlinear equations and the theory of differential equations with singular point of first kind are employed. The general existence theorems are demonstrated on example of nonlinear differential equations describing magnetic insulations.

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2. Abdallah N. B., Degond. P., Mehats F. Mathematical models of magnetic insulation. Rapport interne No. 97.20, MIP. - Universite Poul Sabatier, Toulouse, France, 1997.