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Numerical Soliton and Oscillating Wave Solutions for Flierl-Petviashvili Equation in Plasmas

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Abstract: Numerical axisymmetric soliton and oscillating wave solutions for the Flierl-Petviashvili equation in plasmas are presented. Solution branch paradigm and examples are given. Some implications of results to ion drift wave as well as force-free field of magnetic equilibrium are briefly discussed.

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Key words: solitons, drift waves, magnetic equilibrium

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