Parametric modulation in the Taylor–Couette ferrofluid flow

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Received 4 April 2006; received in revised form 18 April 2008; accepted 23 April 2008
Available online 2 June 2008
Communicated by T. Yoshinaga

Abstract
A parametric instability of the Taylor–Couette ferrofluid flow excited by a periodically oscillating magnetic field, has been investigated numerically. The Floquet analysis has been employed. It has been found that the modulation of the applied magnetic field affects the stability of the basic flow. The instability response has been found to be synchronous with respect to the frequency of periodically oscillating magnetic field.

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MSC: 76-XX; 76D17; 76E07

Keywords: Ferrofluid; Couette–Taylor instability; Parametric modulation

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