

Structure and stability of flow around non-circular islands

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Rabinovich, Kizner, and Flierl have been examining the stability of flow around a circular island. However, when it is not circular (and which real islands are?), the problem is quite different. There is no longer an equivalent of the Rayleigh theorem so that instability may be much more likely. The project involves first finding steady states and then examining the stability. The methods we have been using for the steady state problem may be of help and perhaps can be extended to find steady but unstable states.