Abstract

*"The geometry of transition in shear flows"* Norman Lebovitz, University of Chicago

Laminar flows become turbulent despite their stability to sufficiently small perturbations. Transition towards turbulence requires perturbations large enough to transgress the boundary of the basin of attraction of the laminar flow. At least for intermediate values of the Reynolds number this boundary fails to separate the basin of attraction from the turbulent region. We explore the geometric structure that accounts for this.