

1145-35-1890

Bryan Carrillo* (carrillo@math.ucr.edu), **Xinghong Pan** and **Qi S Zhang**. *Decay and vanishing of some axially symmetric D-solutions of the Navier-Stokes equations.*

One open question in the study of the steady incompressible three-dimensional Navier-Stokes equations is if the only solution with finite Dirichlet integral and vanishing condition at infinity is the trivial solution. Several partial results have been proven by requiring certain integral or decay conditions on the solution. We will explore a certain class of solutions, called axially-symmetric D-solutions, and discuss some results about these solutions. (Received September 24, 2018)