



Partial Differential Equations and Applied Mathematics Seminar

Incompressible Euler equations and the effect of changes at a distance

Elaine Cozzi, Oregon State University

Because pressure is determined globally for the incompressible Euler equations, a localized change to the initial velocity will have an immediate effect throughout space. For solutions to be physically meaningful, one would expect such effects to decrease with distance from the localized change, giving the solutions a type of stability. One can easily show that this is the case for sufficiently smooth solutions having spatial decay. In this talk, we consider a broader class of weak solutions with vorticity lacking spatial decay, and we show that such stability still holds. This is based on joint work with James Kelliher.

Thursday, December 6th, 2018 at 2:00 PM.
Korman 245

www.math.drexel.edu/~jdoug/seminar/
grs53@drexel.edu