

GSS Talk for November 23, 2009
Speaker: David Karapetyan

On the Uniqueness of Solutions to the Burgers Equation in Sobolev Spaces

It is shown that solutions to the Burgers initial value problem are unique in Sobolev Spaces H^s for $s > 3/2$. Using a modification of the Kato-Ponce commutator estimate, an energy estimate for the Burgers i.v.p is derived; an application of Gronwall's inequality then yields the desired result.