1107-35-262 **Tristan Buckmaster*** (buckmaster@cims.nyu.edu). *Onsager's Conjecture.*

In 1949, Lars Onsager in his famous note on statistical hydrodynamics conjectured that weak solutions to the Euler equation belonging to Hölder spaces with Hölder exponent greater than 1/3 conserve energy; conversely, he conjectured the existence of solutions belonging to any Hölder space with exponent less than 1/3 which dissipate energy.

The first part of this conjecture has since been confirmed (cf. Eyink 1994, Constantin, E and Titi 1994). During this talk we will discuss recent work by Camillo De Lellis, László Székelyhidi Jr., Philip Isett and myself related to resolving the second component of Onsager's conjecture. In particular, we will discuss the construction of weak non-conservative solutions to the Euler equations whose Hölder $1/3 - \epsilon$ norm is Lebesgue integrable in time. (Received January 16, 2015)