

1056-35-1031 **Changyou Wang*** (cywang@ms.uky.edu), Department of Mathematics, University of Kentucky,
Lexington, KY 40506. *Homogenization in L^∞* . Preliminary report.

In this talk, we will discuss the Γ -limit of the L^∞ -functionals as ϵ tends to zero:

$$esssup_{x \in [0,1]^n} H\left(\frac{x}{\epsilon}, \frac{u}{\epsilon}, \nabla u\right),$$

where H is 1-period in the first two variables. The goal is to try identifying the effective Hamiltonian function. Also we will discuss the convergence of viscosity solutions of the corresponding Aronsson's equations. (Received September 20, 2009)