1035-46-887 **Ryan Mullen*** (mullenr@sacredheart.edu), Mathematics Department, Sacred Heart University, 5151 Park Avenue, Fairfield, CT 06825. *An A^1 Function that is Not in Lip_α For Any Positive α.*

Let A^1 be the Banach algebra of all continuous functions on the torus whose Fourier coefficients are in ℓ^1, and let Lip_α be the Banach algebra of all continuous function f on the torus such that

$$\|f\| = \sup_{x\in\mathbb{T},h\neq 0} |\frac{f(x+h)-f(x)}{h^\alpha}| < \infty.$$

We produce an example of an A^1 function that is not in Lip_α for any $0 < \alpha \leq 1$. (Received September 17, 2007)