1067-11-1883 **Thomas J Wright*** (`thomas.j.wright@lawrence.edu`), Lawrence University, Mathematics Department, 711 E. Boldt Way - SPC 24, Appleton, WI 54911. *The Connection Between Germain Primes and Twin Primes.*

For many classes of pairs of primes (including twin primes, cousin primes, Sophie Germain primes, and other related prime pairs), it has been conjectured that the asymptotic density of these pairs is about $\frac{x}{\log^2 x}$. In this talk, we show that if the Sophie Germain primes are of this conjectured density and satisfy an additional assumption about well-distributedness in congruence classes then there are infinitely many twin primes. The result depends upon the use of adelic methods to restate an error term as a Schwartz function, thereby allowing for the use of Fourier analytic techniques. This is joint work with Ben Weiss. (Received September 22, 2010)