Mathematics Department Colloquium

Organizer: Olga Holtz

Thursday, 4:10–5:00pm, 60 Evans

Sep. 18   **Ben Green**, University of Cambridge

Counting patterns of primes using nilmanifolds

I shall discuss recent work with Terence Tao in which we obtain (for example) an asymptotic for the number of quadruples $p_1 < p_2 < p_3 < p_4 < N$ of primes which lie in arithmetic progression. I intend to emphasise the role played by nilpotent Lie groups in this theory, though I will introduce everything I need from scratch and, with luck, the talk will be accessible to everyone.