Frédéric Bayart (Université Blaise Pascal, France)

Title: Mixing operators and small subsets of the circle

Abstract: We provide complete characterizations, on Banach spaces with cotype 2, of those linear operators which happen to be weakly mixing or strongly mixing transformations with respect to some nondegenerate Gaussian measure. These characterizations involve two families of small subsets of the circle: the countable sets, and the so-called *sets of uniqueness* for Fourier-Stieltjes series. The most interesting part, i.e. the sufficient conditions for weak and strong mixing, is valid on an arbitrary (complex, separable) Fréchet space.

(joint work with E. Matheron)