

Department of Mathematics, Statistics and Computer Science  
COLLOQUIUM ANNOUNCEMENT

*A mixing operator  $T$  for which  $(T, T^2)$  is not disjoint transitive*

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Cudahy Hall, Room 401

Abstract

We answer a question posed by ~~EB~~ Martin, Peris and Shkarin concerning dynamics of linear operators by using a result from ergodic Ramsey theory. In answering this question, Szemerédi's famous theorem will unexpectedly play an important role. Indeed, using a kind of Szemerédi's theorem for generalized polynomials we show a mixing operator  $T$  on a Hilbert space such that the tuple  $(T, T^2)$  is not disjoint transitive.

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For further information: see <http://www.marquette.edu/mscs/resources/colloquium.shtml>

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