

GRADUATE SEMINAR

Patrick Melanson

C^* —Subproduct Systems, Kolmogorov Systems, and Limits

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3:30 pm

University of Regina

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Centre for Kin, Health & Sport 185

Abstract: In this presentation, we introduce the idea of C^* —subproduct systems, one possible way to model sequential events or states. Explicitly, we work with families of C^* -algebras and the $*$ —homomorphisms between them, satisfying certain associative properties. We discuss how to dilate these systems by forming a related direct (sometimes called inductive) system and taking the direct/inductive limit. We then use the same arguments to tackle Kolmogorov systems, which one can think of as the reverse of C^* —subproduct systems. In these systems we "glue" the spaces together, and thus we construct an inverse (or projective) system in an attempt to create an appropriate dilation.