

GRADUATE SEMINAR

Alaa Alzulaibani

The Arveson–Stinespring subproduct system of a quasi-free quantum dynamical semigroup

PhD Student supervised by Remus Floricel

Tuesday, December 2, 2014

12:00–1:00pm

CW 307.20 (Lounge)

Abstract: Quasi-free quantum dynamical semigroups are semigroups $\{T_t\}_{t \geq 0}$ defined at the level of a Weyl system $\{W(f)\}_{f \in Z}$ over a symplectic space Z as $T_t(W(f)) = \Gamma_t(f)W(S_t(f))$ with respect to a semigroup $\{S_t\}_{t \geq 0}$ of symplectic transformations of the symplectic space Z and a family $\{\Gamma_t\}_{t \geq 0}$ of complex valued functions on Z . In this presentation, we will compute the Arveson–Stinespring subproduct system of quasi-free quantum dynamical semigroup acting on factors of type I_∞ .