

IMIA Operator Algebra Seminar
University of Wollongong

Title : On the boundary quotients of $\mathcal{T}(\mathbb{N} \rtimes \mathbb{N}^\times)$

Speaker: Nathan Brownlowe (UOW)

Abstract: We examine the Toeplitz algebra $\mathcal{T}(\mathbb{N} \rtimes \mathbb{N}^\times)$ of the affine semigroup over the natural numbers $\mathbb{N} \rtimes \mathbb{N}^\times$, which was recently studied by Laca and Raeburn. We examine three quotients of this algebra: the C^* -algebra $\mathcal{Q}_{\mathbb{N}}$ recently introduced by Cuntz, and two new ones, which we call the additive and multiplicative boundary quotients. We then examine the connections between $\mathcal{T}(\mathbb{N} \rtimes \mathbb{N}^\times)$, $\mathcal{Q}_{\mathbb{N}}$ and our new quotients and Larsen's Exel crossed products by semigroups.

In the first talk we will look at $\mathcal{T}(\mathbb{N} \rtimes \mathbb{N}^\times)$ and its boundary quotients. In the second talk we will look at Exel-Larsen crossed products.

This is joint work with Astrid an Huef, Marcelo Laca and Iain Raeburn.

Time and Date: 3:30pm, Tuesday May 31 and Tuesday June 7, 2011

Location: Room 19.1093