

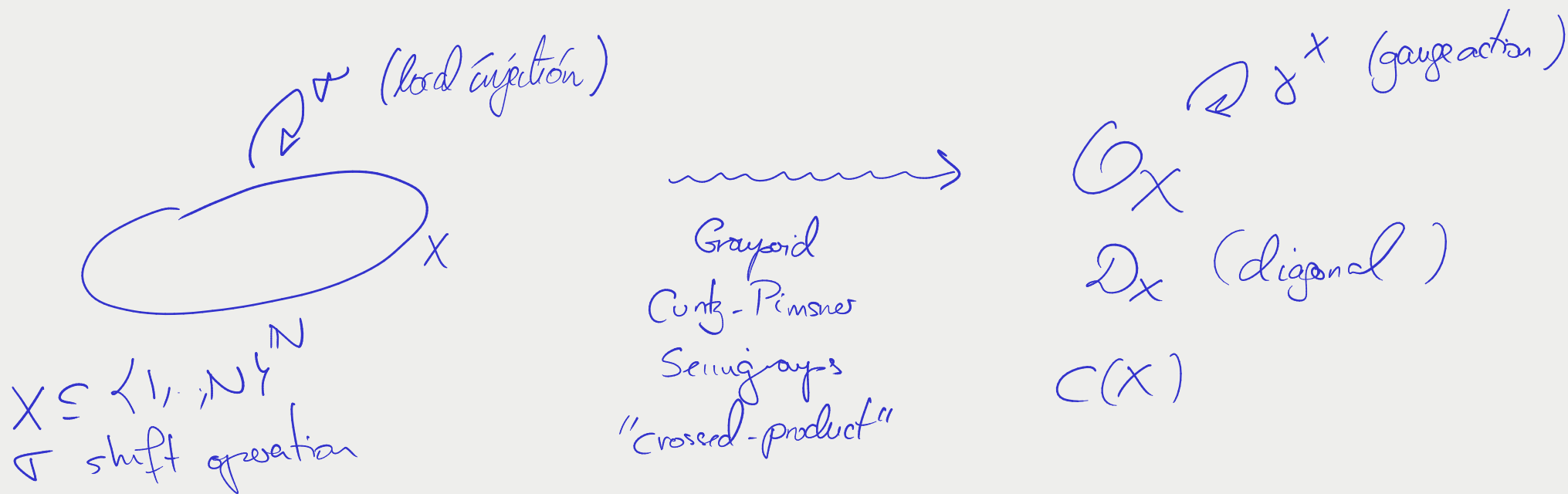
C^* -algebras from symbolic dynamical systems

- * Shifts of finite type
- * Sofic
- * Sturmian

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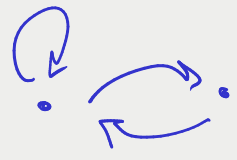


* SFT

Golden mean



FLOW
↔



\mathcal{O}_X

\mathcal{O}_Y

con/3/80
Krieger

FLOW

\Rightarrow

$$\mathcal{O}_X \otimes K \cong \mathcal{O}_Y \otimes K$$

X

Y

\Leftarrow

$$C(X) \otimes C_0$$

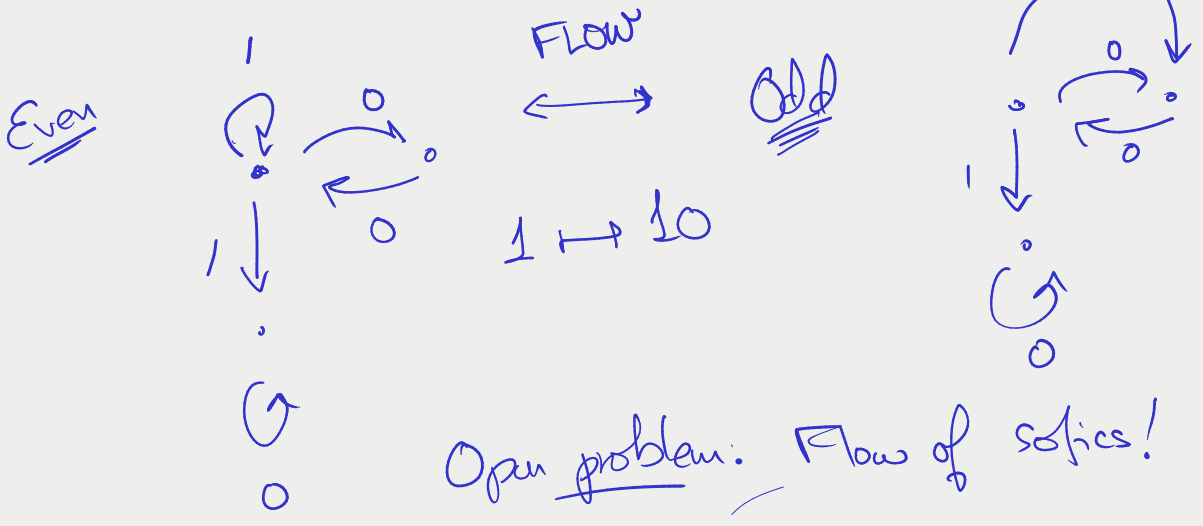
$$C(Y) \otimes C_0$$

Matsumoto

Matui 2014

* Sefics \neq SFT

Finite directed labelled graphs



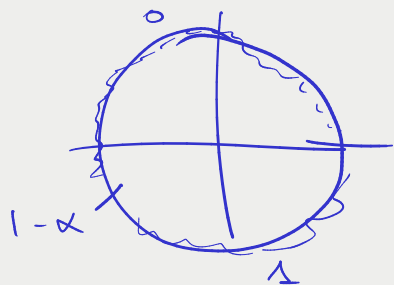
* alg's of sefics: CK-alg's
(except new data
in diagonal!)

Sturmians

Rigid rotation

$$\alpha \in (0,1) \setminus \mathbb{Q}$$

$$\mathbb{T} = \mathbb{R}/\mathbb{Z}$$



$$\{ [0, 1-\alpha), [1-\alpha, 1) \}$$



0



1

\mathbb{X}_α space of seg's.

Cantor
minimal
systems

Thm $\mathbb{O}_{\mathbb{X}_\alpha}$ infinite + unique ideal
 $\mathbb{R}\mathbb{R}\mathbb{O} + \mathbb{S} = \mathbb{1}$
mod dim = 1.

Flow \Leftrightarrow Moita eq $\Leftrightarrow \alpha \sim \beta$

Conj $\Leftrightarrow \alpha = \beta, 1-\beta. \Leftrightarrow$ isom.

