# CURRICULUM VITAE OF KEVIN AGUYAR BRIX

## **CONTACT INFORMATION:**

Email: kabrix.math@fastmail.com

Website: https://kevinaguyarbrix.github.io
Address: School of Mathematics and Statistics

University of Glasgow University Place

Glasgow G12 8QQ, United Kingdom

# **EMPLOYMENT AND AFFILIATION:**

Mar 2021 – Postdoc, University of Glasgow, United Kingdom

Funded by a Carlsberg Foundation Internationalisation Fellowship;

Feb 2020 - Feb 2021: Postdoc, University of Wollongong, Australia

Funded by a Carlsberg Foundation Internationalisation Fellowship;

Sep 2019 – Jan 2020: External lecturer, University of Copenhagen, Denmark

Temporary teaching position.

### **EDUCATION:**

Sep 2019: Doctor of philosophy in Mathematics, University of Copenhagen

Title: Topological dynamics, groupoids and  $C^*$ -algebras,

Supervisor: Professor Søren Eilers;

May 2016: Master of Science in Mathematics, University of Copenhagen; Feb 2014: Bachelor of Science in Mathematics, University of Copenhagen.

## PUBLICATIONS:

- K.A. Brix, Balanced strong shift equivalence, balanced in-split, and eventual conjugacy, Ergodic Theory and Dynamical Systems (2020), doi:10.1017/etds.2020.126.
- K.A. Brix and T.M. Carlsen,  $C^*$ -algebras, groupoids and covers of shift spaces, Transactions of the American Mathematical Society, Series B 7 (2020), 134–185.
- K.A. Brix and E. Scarparo,  $C^*$ -simplicity and representations of topological full groups of groupoids, Journal of Functional Analysis **227** (2019), no. 9, 2981–2996.
- K.A. Brix and T.M. Carlsen, *Cuntz-Krieger algebras and one-sided conjugacy of shifts of finite type and their groupoids*, Journal of the Australian Mathematical Society **109** (2020), no. 3, 289–298.

#### **WORK IN PROGRESS:**

**K.A. Brix**: Sturmian shifts and their  $C^*$ -algebras;

B. Armstrong, **K.A. Brix**, T.M. Carlsen and S. Eilers: *Conjugacy and graph*  $C^*$ -algebras; **K.A. Brix**, T.M. Carlsen and A. Sims: *The ideal structure of Deaconu–Renault groupoid*  $C^*$ -algebras.

#### **GRANTS:**

Mar 2021 – Dec 2021: Carlsberg Foundation Internationalisation Fellowship (€38050)

Hosted by University of Glasgow, United Kingdom.

Feb 2020 – Feb 2021: Carlsberg Foundation Internationalisation Fellowship (€47050)

Hosted by University of Wollongong, Australia.

#### RESEARCH TALKS AND PRESENTATIONS:

The following is a list of invited talks on or around my area of research.

Mar 2021:	United Kingdom Operator Algebras seminar (virtual), United Kingdom.
Feb 2021:	Operator Algebras seminar (virtual), Copenhagen/Odense, Denmark.
Jun 2020:	Abend seminar (virtual), University of Western Sydney, Australia.
Nov 2019:	Seminar, Queen Mary University, London, England.
Nov 2019:	Oberseminar, WWU Münster, Germany.
Oct 2019:	Analysis seminar, KU Leuven, Belgium.
Jan 2019:	Analysis seminar, University of Glasgow, Scotland.
Dec 2018:	Danish Operator Aalgebra Seminar,
	University of Southern Denmark, Denmark.
Jun 2018:	Workshop in operator algebras and dynamics,
	University of the Faroe Islands, the Faroe Islands.
Feb 2018:	Seminar, University of Wollongong, Australia.
Jan 2018:	Seminar, University of Western Sydney, Australia.
May 2017:	CRM, Universitat Autónoma de Barcelona, Spain.
Sep 2016:	PhD seminar, University of Copenhagen, Denmark.

# SERVICE TO THE PROFESSION AND COMMUNITY:

- I organised the Operator Algebra and NonCommutative Geometry seminar at the University of Wollongong, Australia.
- I have worked as referee for *Mathematica Scandinavica*, *Journal of Mathematical Analysis and Applications*, and *Studia Mathematica*.
- I was an organiser for the following conferences/workshops:
  - Young Mathematicians in C\*-Algebra (YMC\*A), 2017 and 2019, University of Copenhagen,

- ∘ *Rigidity of* C\*-algebras associated to dynamics, 2017, University of Copenhagen,
- o Danske Unge C\*-algebraikers Symposium (DUC\*S) 2017, University of Aarhus.
- I was the Ph.D and Postdoc representative for the Local Collaboration Committee (lokal samarbejdsudvalg, LSU), January 2017 to January 2019, Department of Mathematical Sciences at the University of Copenhagen.

#### **TEACHING EXPERIENCE:**

2020: MATH151 (general mathematics), lecturer

2019: Mathematical modeling, (exercises)

Numerical analysis, (exercises)

2016–2019: Supervision of 1 Master's project (30 ECTS) and

1 Graduate project (15 ECTS) with Søren Eilers

Functional analysis, (exercises and occasional lectures)

Numerical analysis, (exercises)

Differential equations and control theory, (exercises).

2011–2016: Introduction to Mathematics, (exercises)

Linear algebra, (exercises)

Discrete Mathematics, (exercises)
Analysis 0, 1, and 2, (exercises)
Measure and integration, (exercises)
Mathematics for biologists, (exercises)
Philosophy of science, (exercises).