

CURRICULUM VITAE OF KEVIN AGUYAR BRIX

CONTACT INFORMATION:

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EMPLOYMENT AND AFFILIATION:

Mar 2021 – present: *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:

- B. Armstrong, **K.A. Brix**, T.M. Carlsen, and S. Eilers: *Conjugacy of local homeomorphisms via groupoids and C^* -algebras*, arXiv preprint.
- **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 of graphs*;
K.A. Brix, T.M. Carlsen, and A. Sims: *The ideal structure of 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.

Apr 2021: Operator Algebra and Noncommutative Geometry seminar (virtual),
University of Wollongong, Australia.
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 Autònoma 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 in 2020 at the University of Wollongong, Australia.
- I have worked as referee for *Journal of Mathematical Analysis and Applications*, *Mathematica Scandinavica*, 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,
- *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).