Alexander Youcis

Curriculum Vitae

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https://alex-youcis.github.io/

Education

2013–2019 **PhD**, *University of California, Berkeley (advised by Sug Woo Shin)*.
2013 **Bachelor's degree**, *University of Maryland, College Park*.

Positions held

2021-Present **JSPS Fellow**, *University of Tokyo*.
2019-2021 **Postdoc**, *Institute of Mathematics of the Polish Academy of Sciences*.

Teaching Experience

Summer 2018 Instructor for number theory (Math 115), University of California, Berkeley
Summer 2017 Instructor for number theory (Math 115), University of California, Berkeley
2013–Present Graduate Student Instructor, University of Californa, Berkeley

Research interests

Arithmetic geometry, representation theory, and local/global methods used in the Langlands program. In particular: Shimura varieties, moduli spaces of local Shutkas, p-adic Hodge theory, p-adic geometry, p-adic representation theory and endoscopic methods.

Published and accepted papers

A. Bertoloni Meli and A. Youcis. *An approach to the characterization of the local Langlands correspondence* (Accepted at *Representation Theory*), `https://arxiv.org/abs/2003.11484`

P. Achinger, M. Lara, and A. Youcis. *Geometric arcs and fundamental groups* (Accepted at *Journal für die reine und angewandte Mathematik*), `https://arxiv.org/abs/2105.05184`

P. Achinger, M. Lara, and A. Youcis. Specialization for the pro-étale fundamental group. Compos. Math. 158 (2022), no. 8, 1713–1745. MR4490930

E. Beazley, M. Nichols, M. Park, X. Shi, and A. Youcis. *Bijective projections on parabolic quotients of affine Weyl groups*, Journal of Algebraic Combinatorics (2014), DOI: 10.1007/s10801-014-0559-9

Preprints

K. Česnavičius, and A. Youcis. *The analytic topology is enough for the B^+_{dR}-Grassmannian* (Submitted). https://arxiv.org/abs/2303.11710

P. Achinger, M. Lara and A. Youcis. *Variants of the de Jong fundamental group* (Submitted). https://arxiv.org/abs/2203.11750.

A. Bertoloni Meli, N. Imai, and A. Youcis, *The Jacobson–Morozov morphism for Langlands parameters in the relative setting* (Submitted), `https://arxiv.org/abs/2203.01768`

A. Bertoloni Meli and A. Youcis, *The Scholze-Shin conjecture for Unramified Unitary Groups I: The No Endoscopy Case*, `https://alex-youcis.github.io/ScholzeShinIMPAN.pdf`

A. Youcis, *The Langlands-Kottwitz-Scholze method for Shimura varieties of abelian type* (In preparation)

Professional activities

2014-2017 Founded and ran the Berkeley Directed Reading Program (a program to pair undergraduate and graduate students for independent study)

2014-2017 Mentor in the Berkeley Directed Reading Program

Selected talks

2022 A prismatic realization functor for Shimura varieties of abelian type, University of Michigan

2022 A prismatic realization functor for Shimura varieties of abelian type, POSTECH

2021 Geometric coverings of rigid spaces, University of Tokyo number theory seminar

2021 Geometric coverings of rigid spaces, University of Alberta arithmetic geometry seminar

2021 Geometric coverings of rigid spaces, RAMpAGe seminar

2020 An approach to characterizing the local Langlands correspondence over p-adic fields, CARTOON conference

2019 The Scholze–Shin conjecture for unramified unitary groups, University of Cambridge

2019 The Scholze–Shin conjecture for unramified unitary groups, University of Warsaw

2018 The Langlands–Kottwitz–Scholze method for Shimura varieties of abelian type, University of Maryland

2018 The Langlands–Kottwitz-Scholze method for Shimura varieties of abelian type, University of Minnesota

2018 The Langlands–Kottwitz-Scholze method for Shimura varieties of abelian type, Stanford University

2018 The Langlands–Kottwitz–Scholze method for Shimura varieties of abelian type, University of Tokyo

2017 Étale morphisms for perfectoid spaces, Arizona Winter School

2017 Étale morphisms for perfectoid spaces, University of Tokyo

Awards and fellowships

2022 Long term JSPS fellowship

2021 Short term JSPS fellowship

2018 Berkeley RTG Grant Fellowship

2017 Berkeley RTG Grant Fellowship