



## Richard Taylor

Barbara Kimball Browning Professor in the School of Humanities and Sciences  
Mathematics

### Bio

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#### ACADEMIC APPOINTMENTS

- Professor, Mathematics

### Teaching

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#### COURSES

##### 2025-26

- Galois Theory: MATH 121 (Win)
- Modern Algebra II: MATH 210B (Win)
- Topics in number theory: MATH 249A (Aut)

##### 2024-25

- Galois Theory: MATH 121 (Win)
- Groups and Rings: MATH 120 (Aut)
- Topics in Number Theory: MATH 249B (Win)

##### 2023-24

- Groups and Rings: MATH 120 (Spr)
- Modules and Group Representations: MATH 122 (Spr)

##### 2022-23

- Groups and Rings: MATH 120 (Aut)
- Modern Algebra I: MATH 210A (Aut)
- Topics in Number Theory: MATH 249B (Win)

#### STANFORD ADVISEES

##### Doctoral Dissertation Reader (AC)

Ben Church

##### Doctoral Dissertation Advisor (AC)

STEPAN KAZANIN, Daniel Kim, Vaughan McDonald

##### Doctoral (Program)

Zhuo Zhang

## Publications

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### PUBLICATIONS

- **Potential automorphy over CM fields** *ANNALS OF MATHEMATICS*  
Allen, P. B., Calegari, F., Caraiani, A., Gee, T., Helm, D., Le Hung, B. V., Newton, J., Scholze, P., Taylor, R., Thorne, J. A.  
2023; 197 (3): 897-1113
- **On the rigid cohomology of certain Shimura varieties** *RESEARCH IN THE MATHEMATICAL SCIENCES*  
Harris, M., Lan, K., Taylor, R., Thorne, J.  
2016; 3
- **Automorphy and irreducibility of some I-adic representations** *COMPOSITIO MATHEMATICA*  
Patrikis, S., Taylor, R.  
2015; 151 (2): 207–29
- **The image of complex conjugation in I-adic representations associated to automorphic forms** *ALGEBRA & NUMBER THEORY*  
Taylor, R.  
2012; 6 (3): 405–35
- **A Family of Calabi-Yau Varieties and Potential Automorphy II** *PUBLICATIONS OF THE RESEARCH INSTITUTE FOR MATHEMATICAL SCIENCES*  
Barnet-Lamb, T., Geraghty, D., Harris, M., Taylor, R.  
2011; 47 (1): 29–98
- **A family of Calabi-Yau varieties and potential automorphy** *ANNALS OF MATHEMATICS*  
Harris, M., Shepherd-Barron, N., Taylor, R.  
2010; 171 (2): 779–813
- **AUTOMORPHY FOR SOME I-ADIC LIFTS OF AUTOMORPHIC MOD I GALOIS REPRESENTATIONS. II** *PUBLICATIONS MATHÉMATIQUES DE L'IHES, NO 108*  
Taylor, R.  
edited by Ghys, E., Bourgain, J., Connes, A., Deligne, P., Gromov, M., Kontsevich, M., Lafforgue, L., Sullivan, D., Voisin, C.  
2008: 183–239
- **AUTOMORPHY FOR SOME I-ADIC LIFTS OF AUTOMORPHIC MOD I GALOIS REPRESENTATIONS** *PUBLICATIONS MATHÉMATIQUES DE L'IHES, NO 108*  
Clozel, L., Harris, M., Taylor, R.  
edited by Ghys, E., Bourgain, J., Connes, A., Deligne, P., Gromov, M., Kontsevich, M., Lafforgue, L., Sullivan, D., Voisin, C.  
2008: 1–181