CURRICULUM VITAE

NAME: Richard Lawrence Taylor
DATE OF BIRTH: 19 May 1962
NATIONALITIES: US and British

CAREER:

1980-84	BA, Cambridge University, England.
1984-88	PhD, Princeton University, U.S.A. (advisor Andrew Wiles).
1988-95	Fellow of Clare College, Cambridge.
1988-89	Royal Society European Exchange Fellow at Institut des Hautes Etudes Scientifiques, Paris.
1989-95	Assistant Lecturer, Lecturer then Reader at Cambridge University.
1995-96	Savilian Professor of Geometry at Oxford University and fellow of New College.
1996-2012	Professor of Mathematics, then Herchel Smith Professor of Mathematics, Harvard University.
2012-19	Robert and Luisa Fernholz Professor, IAS, Princeton.
2018-	**Barbara Kimball Browning Professor in Humanities & Sciences, Stanford University.**

VISITING POSITIONS:

1992	Visiting Assistant Professor at Caltech.
1994	Visiting Professor at Harvard University.
1999	Miller Visiting Professor at Berkeley.
2010-11	Distinguished Visiting Professor at IAS, Princeton.

PRIZES AND FELLOWSHIPS:

1987-88	Sloan Foundation Doctoral Dissertation Fellowship.
1990	Whitehead Prize (from the LMS).
1992	Prix Franco-Brittanique (from the French Academie des Sciences).
1995-	Fellow of the Royal Society.
2001	Ostrowski Prize (shared with H.Iwaniec and P.Sarnak).
2001	Fermat Prize for Mathematics (shared with W.Werner).
2002	Cole Prize for Number Theory (from the AMS, shared with H.Iwaniec).
2002-03	Guggenheim Fellowship.
2005	Dannie Heinemann Prize, Gottingen Academy of Sciences.
2007	Clay Research Award.
2007	Shaw Prize in Mathematics (shared with R.Langlands).
2012-	Member of the American Academy of Arts and Sciences.
2013-	Fellow of the American Mathematical Society.
2014	Breakthrough Prize in Mathematics.
2015-	Member of the National Academy of Sciences.
2018-	Member of the American Philosophical Society.

LECTURES:

1994	Invited speaker at the Zurich ICM.
2000	Kuwait Fund lecture at Cambridge University.
2000	Richard E. Phillips lectures at Michigan State University.
2001	Ritt lectures at Columbia University.
2001	Opening lecture at the 2001 Mathematische Arbeitstagung.
2002	Invited 1 hour address at AMS national meeting.
2002	Albert lectures at the University of Chicago.
2002	Invited plenary speaker at the Beijing ICM.
2003	De Long lectures at the University of Colorado, Boulder.
2004	Alaoglu lecture, Caltech.
2004	Whittemore lectures at Yale.
2004	R.L.Moore lecture at the University of Texas, Austin.
2008	Invited plenary speaker at the Amsterdam ECM.
2009	Chern lectures at UC Berkeley.
2011	Milliman lectures at the University of Washington, Seattle.
2012	Weierstrass Lecture at the University of Paderborn.
2013	UCLA Distinguished Lecture Series.
2014	Rouse Ball Lecture at Cambridge University.
2017	Invited 1 hour address at AMS national meeting.
2018	Rainich Lectures, University of Michigan.

PhD STUDENTS (36):

Frazer Jarvis (Sheffield University), Karsten Buecker (hedge fund), Kevin Buzzard (Imperial College), Luiz Figueiredo (Universidade Federal Fluminense, Brazil), Oliver Bültel, Mark Dickinson (software), Sam Williams (film), Russ Mann (finance), David Savitt (Johns Hopkins), Elena Mantovan (Caltech), Peter Green (hedge fund), Grigor Grigorov (hedge fund), Florian Herzig (University of Toronto), Michael Schein (Bar-Ilan University), Teruyoshi Yoshida, Sug-Woo Shin (UC Berkeley), Kai-Wen Lan (University of Minnesota), Tom Barnet-Lamb (hedge fund), Suh-Hyun Choi (KAIST), David Geraghty (high tech industry), Wushi Goldring (Stockholm University), Ana Caraiani (Imperial College), Jack Thorne (Cambridge University), Bao Le Hung (Northwestern), George Boxer (ENS Lyon), Ila Varma (UCSD), Lue Pan (Princeton University), Susan Xia (data science industry), Jun Su (Cambridge University), Jack Sempliner (Imperial College), Weibo Fu (hedge fund) and 5 current students.

ADMINISTRATION:

1994-2000	Editor of Inventiones Mathematicae.
1996	Co-organiser (with Tony Scholl) of the LMS Durham symposium on "Galois representations in arithmetic algebraic geometry".
1999	Co-organiser of MSRI hot topics meeting on "modularity of elliptic curves and beyond".
2000-2002	Mathematical sciences sectional committee of the Royal Society.
2000-2022	Editor of the Duke Mathematical Journal.
2002-2010	Director of Graduate Studies, Harvard mathematics department.
2003-2005	Program committee for ICM 2006.

2006	Lead organizer of MSRI hot topics meeting on "modularity for $GL(2)$ and beyond".
2007-2013	Editor of Algebra and Number Theory.
2009-2015	MSRI Scientific Advisory Committee (co-chair from 2012).
2009-2010	Lead organizer of Harvard conference "Number Theory and Representation theory".
2010-2011	Organizer IAS special year "Galois Representations and Automorphic Forms".
2012-2015	MSRI Board of Trustees.
2012-	Editor of Forum of Mathematics.
2013	Lead organizer MSRI hot topics meeting "perfectoid spaces and their applications".
2013-2015	Editor of Annals of Mathematics.
2015-2018	Chair of the Number Theory Panel for ICM 2018.
2016	Co-organizer IAS Emerging Topics Working Group on"Applications to modularity of recent progress on the cohomology of Shimura varieties".
2017-2020	Scientific Steering Committee of the Newton Institute.
2017-18	Acting Executive Officer, IAS School of Mathematics.
2021-	Editor of the Journal of the AMS

Various prize committees: AMS Cole Prize (2004 chair and 2010),
Blumenthal Award (2004), Nemmers Prize (2006), Infosys Prize (2012, 2013, 2014),
Fermat Prize (2013, 2019),
Breakthrough and New Horizons Prizes in Mathematics (2015-, chair 2015-2020),
AMS Satter Prize (2019, and 2021 chair), Fields Medal Committee (2019-2022).

Various mathematics visiting committees: MIT (2016, 2018, 2020, 2023),
NSF (2016 subcommittee chair), Columbia (2017), MSRI (2017 chair),
Northwestern University (2018).

PUBLICATIONS: (mostly available at `http://virtualmath1.stanford.edu/~rltaylor/`)

42. On the Formalism of Shimura Varieties, *with J. Sempliner, preprint, 142pp*

41. Potential automorphy over CM fields, *with P.Allen, F.Calegari, A.Caraiani, T.Gee, D.Helm, B.Le Hung, J.Newton, P.Scholze, J.Thorne, to appear Annals of Math., 192pp*

40. On the rigid cohomology of certain Shimura varieties, *with M.Harris, K.-W.Lan and J.Thorne, Research in the Mathematical Sciences 3 (special issue in honor of Robert Coleman) (2016), 308pp*

39. Automorphy and irreducibility of some l-adic representations, *with S.Patrikis, Compositio Math. 151 (2015), 207-229.*

38. Local-global compatibility for $l = p$ II, *with T.Barnet-Lamb, T.Gee and D.Geraghty, Ann. Sci. de l'ENS 47 (2014), 161-175.*

37. Local-global compatibility for $l = p$ I, *with T.Barnet-Lamb, T.Gee and D.Geraghty, Ann. de Math. de Toulouse 21 (2012), 57-92.*

36. Adequate subgroups, *with R.Guralnick, F.Herzig and J.Thorne, J. Inst. Math. Jussieu 11 (2012), 907-920.*

35. Potential automorphy and change of weight, *with T.Barnet-Lamb, T.Gee and D.Geraghty, Annals of Math. 179 (2014), 501-609.*

34. The image of complex conjugation in l-adic representations associated to automorphic forms, *Algebra and Number Theory 6 (2012), 405-435.*

33. A family of Calabi-Yau varieties and potential automorphy II, *with T.Barnet-Lamb, D.Geraghty and M.Harris, P.R.I.M.S. 47 (2011), 29-98.*

32. Reciprocity laws and density theorems, *to appear in the Shaw Prize Book* (review article).

31. Automorphy for some l-adic lifts of automorphic mod$l$ representations II, *Pub. Math. IHES 108 (2008), 183-239.*

30. A family of Calabi-Yau varieties and potential automorphy, *with M.Harris and N.Shepherd-Barron, Annals of Math. 171 (2010), 779-813.*

29. Automorphy for some l-adic lifts of automorphic mod$l$ representations I, *with L.Clozel and M.Harris, Pub. Math. IHES 108 (2008), 1-181.*

28. Compatibility of local and global Langlands correspondences, *with T.Yoshida, Journal of the AMS 20 (2007), 467-493.*

27. On the meromorphic continuation of degree two L-functions, *Documenta Mathematica, Extra Volume: John Coates' Sixtieth Birthday (2006), 729-779.*

26. Galois representations, *Annales de la Faculte des Sciences de Toulouse 13 (2004), 73-119*, (extended version of 25).

25. Galois representations, *Proceedings of ICM 2002, volume I, 449-474* (review article).

24. On icosahedral Artin representations II, *Amer. J. Math. 125 (2003), 549-566.*

23. Remarks on a conjecture of Fontaine and Mazur, *Journal of the Institute of Mathematics of Jussieu 1 (2001), 125-143.*

22. On the modularity of rational elliptic curves, *with C.Breuil, B.Conrad and F.Diamond, J.A.M.S. 14 (2001), 843-939.*

21. On icosahedral Artin representations, *with K.Buzzard, M.Dickinson and N.Shepherd-Barron, Duke Math. J. 109 (2001), 283-318.*

20. On the geometry and cohomology of some simple Shimura varieties, *with M.Harris, Annals of Mathematics Studies 151, PUP November 2001.*

19. Modularity of certain potentially crystalline Galois representations, *with B.Conrad and F.Diamond, J.A.M.S. 12 (1999), 521-567.*

18. Companion forms and weight one forms, *with K.Buzzard, Annals of Math. 149 (1999), 905-919.*

17. Icosahedral Galois representations, *Pacific Journal of Math., Olga Taussky-Todd memorial issue, (1997), 337-347.*

16. On degree 2 Galois representations over $\mathbb{F}_4$, *with N.Shepherd-Barron, Proc. Nat. Acad. Sci. USA 94 (1997), 11147-11148.*

15. Mod 2 and mod 5 icosahedral representations, *with N.Shepherd-Barron, J. Amer. Math. Soc. 10 (1997), 283-298.*

14. Fermat's last theorem, *with H.Darmon and F.Diamond, Current Developments in Mathematics 1995, 1-154,* (review article).

13. Ring theoretic properties of certain Hecke algebras, *with A.Wiles, Annals of Math. 141 (1995), 553-572.*

12. Representations of Galois groups associated to modular forms, *in "Proceedings of the International Congress of Mathematicians (Zurich 1994)", 435-442* (review article).

11. On Galois representations associated to Hilbert modular forms II, *in Elliptic Curves, Modular Forms and Fermat's Last Theorem, eds. Coates and Yau, International Press 1995.*

10. Lifting modular mod l representations, *with F.Diamond, Duke Math. J. 74 (1994), 253-269.*

9. Non-optimal levels for mod l modular representations of $\mathrm{Gal}(\overline{\mathbb{Q}}/\mathbb{Q})$, *with F.Diamond, Invent. Math. 116 (1994), 435-462.*

8. l-adic representations associated to modular forms over imaginary quadratic fields II, *Invent. Math. 116 (1994), 619-643.*

7. On the l-adic cohomology of Siegel three folds, *Invent. Math. 114 (1993), 289-310.*

6. l-adic representations associated to modular forms over imaginary quadratic fields I: Lifting to $GSp_4(\mathbb{Q})$, *with M.Harris and D.Soudry, Invent. Math. 112 (1993), 377-411.*

5. An $\tilde{A}_4$ extension of $\mathbb{Q}$ attached to a non-selfdual automorphic form on $GL(3)$, *with A.Ash and R.Pinch, Math. Annalen 291 (1991), 753-766.*

4. Galois representations associated to Siegel modular forms of low weight, *Duke Math. J. 63 (1991), 281-332.*

3. Representations of Galois groups associated to Hilbert modular forms, *in "Automorphic Forms, Shimura Varieties and L-Functions", (Academic Press) (1989), volume II, 323-336.*

2. On Galois representations associated to Hilbert modular forms, *Inventiones Math. 98 (1989), 265-280.*

1. On congruences between modular forms, *PhD thesis, Princeton University (1988).*