

Vita and Bibliography

Henryk Hecht
Professor

Birth date: June 15, 1946
Birthplace: Lodz, Poland

Academic Degrees:

B.S.	1968	University of Warsaw
M.A.	1970	Columbia University
Ph.D.	1974	Columbia University

Professional Experience:

1974-1976	Moore Instructor, Massachusetts Institute of Technology
1976-1977	Member, I.A.S., Princeton
1977-1979	Assistant Professor, University of Utah
1979-1984	Associate Professor (with tenure), University of Utah
1984-	Full Professor, University of Utah
1980-1983	Sloan Fellow
1981 (Winter)	Visiting Scholar, Harvard University
1983 (Spring)	Visiting Associate Professor, University of California, Berkeley
1985 (Spring)	Visiting Professor, University of Marseille, Luminy, France

Specialization:

Representations of Lie Groups

Bibliography:

1. The characters of some representations of Harish Chandra, *Math. Ann.*, 219(1976), pp. 213-226.
2. On integrable representations of semisimple Lie groups (with W. Schmid), *Math. Ann.*, 220(1976), pp. 147-149.
3. A proof of Blattner's Conjecture (with W. Schmid), *Invent. Math.*, 31(1975), pp. 129-154.
4. On characters and asymptotics of admissible representations of a real reductive Lie group, *Math. Ann.*, 242(1979), pp. 103-126.

5. On Kahler identities (this paper is incorporated in the second edition of R. Wells' book "Differential Geometry on Complex Manifolds," Springer Verlag, 1980).
6. Characters, asymptotics and n-homology of Harish-Chandra modules (with W. Schmid), *Acta Math.* 151(1983), pp. 49-151.
7. On the asymptotics of Harish-Chandra modules (with W. Schmid), *Journal für die reine und angewandte Mathematik (Crelles Journal)*, 1983, pp. 169-183).
8. Character identities and asymptotic behavior of matrix coefficients of discrete series (with D. Milicic), *Pac. J. Math.*, 121(1986), pp. 357-369.
9. Localization and standard modules for real semisimple Lie groups I: the duality theorem (with D. Milicic, W. Schmid, J. Wolf), *Inv. Math.*, 90(1987), pp. 297-332.
10. Analytic globalization of group representations (with J. Taylor), *Advances in Mathematics*, 79 (1990), 139-212.
11. On the cohomological dimension of localization function (with D. Milicic), *Proc. Amer. Math. Soc.*, 108(1990), pp. 249-254.
12. A comparison theorem for n-homology (with J. Taylor), *Compositio Mathematica*, 86 (1993), 189-207.
13. Localization and standard modules for real semisimple Lie groups II: vanishing theorems and classifications (with D. Milicic, W. Schmid, J. Wolf), in preparation.
14. A geometric formula for characters of representations (with J. Taylor), preprint.
15. Generalization of Kahler identities (preprint).
16. On Casselman's Compatibility Theorem for n-homology, in "Reductive Lie Groups", Proceedings of Cordoba Conference, Birkhauser, 1997.
17. Bruhat filtrations and Whittaker vectors for real groups (with W. Casselman and H. Hecht) in *The Mathematical Legacy of Harish-Chandra: A Celebration of Representation Theory and Harmonic Analysis*, Proc. Symp. in Pure Math., **68** (2000), Amer. Math. Soc., 151-190.

Grants and Awards:

1. NSF Grant MPS 7001864A04 (with S. Helgason, MIT) 1974-1976.
2. NSF Grant MCS 72-050555A04 (with H. Rossi, University of Utah) 1977-1981.
3. Sloan Fellow, 1980-1983.
4. NSF Grant MCSD 83-03290, 1983-1985.
5. University of Utah Research Fellowship, Fall 1985.
6. NSF Grant DMS 85-03781, 1985-1987.
7. NSF Grant DMS-88-02827, 1987-1990.

Teaching Awards:

1. ASUU Student Choice Award (2003)
2. Department of Mathematics Undergraduate Teaching Award (2003).
3. Department of Mathematics Undergraduate Teaching Award (2016)..
4. Greek Community Professor of the Year Award (2016)

Invited Speaker (Main Events):

1. Conference on Representation Theory, Oberwolfach, West Germany, June 1977.
2. Conference on Representation Theory. University of Chicago, March 1978.
3. School on Representation Theory, University of Neuchatel, Switzerland, April 1981.
4. Conference on Representation Theory, University of San Diego, August 1983.
5. Conference on Representation Theory, Oberwolfach, West Germany, August 1987.
6. AMS Meeting, UCLA, November 14-15, 1987.
7. Conference on Representation Theory, Oberwolfach, West Germany, August 1989.
8. Conference on Representation Theory, University of California, San Diego, January 1992.
9. Conference on Geometric Methods in Representation Theory, Harvard University, June 1992.

10. Conference on Representation Theory of Reductive Lie Groups, Cordoba, Argentina, 1995.

Organization of Conferences:

1. Conference on Representation Theory of Reductive Groups, Park City, Utah, April 1982.
2. Special session on Geometric Methods in Representation Theory, AMS Meeting in Los Angeles, California, November 15, 1987.
3. Workshop on Geometric Methods in Representation Theory, Salt Lake City, Utah, March 1988. Organized jointly by the University of Utah and MSRI.
4. Workshop on Geometric Methods in Representation Theory, Salt Lake City, Utah, 1990.

Supervised Thesis:

1. David Collingwood, Ph.D. 1983, University of Utah
2. Miljenko Zabcic, Ph.D. 1987, University of Utah
3. Mario Candia, Ph.D., 1991, University of Utah
4. Timothy Bratten, Ph.D., 1993, University of Utah
5. Rex Butler, REU Supervisor, 2003-2004

Special Projects (1991- 1995):

Development and maintenance of a comprehensive database management system (Hiring, Graduate students, Book circulation, Departmental directory, Inventory, Accounting).

University Service (since 2000):

University Senate (2000-2003)

College of Science RPT Committee (2000)

College of Science Curriculum Committee, Chair (2002)

University Senate RPT Committee (2001-2003)

University UPTAC Committee (2006-2009)

College of Science Committee on Academic Standards and Degree Programs (2015-2019)

University UPTAC Committee (2016-2018)

Special Duties

Associate Chair of the Department of Mathematics (2009-2012)

Database Support for Associate Chair Office (scheduling, enrollment, etc) (2016-2017)

Present Departmental Committee Assignments (2017-2018)

RPT Chair

Curriculum Committee

Education Committee

Putnam Committee

Courses taught at University of Utah

Between 1977 and 1999 I had taught multiple times the following courses:

Intermediate Algebra

College Algebra

Calculus

Advanced Calculus

Ordinary Differential Equations

Undergraduate Real Analysis

Precalculus for Non Science Majors (Honors College)

Calculus for Non Science Majors (Honors College)

Undergraduate Topology

Graduate Real and Complex Analysis

Graduate Lie Theory

The detailed list of the courses I have taught since 1999 are listed of the following pages.

Courses taught
1999-2017

SEMESTER	YEAR	COURSE_NO	COURSE_NAME
Spring	1999	1260	AP Calculus II
Spring	1999	7220	Lie Gp Repns II
Fall	1999	1250	AP Calculus I
Fall	1999	6210	Real Analysis
Spring	2000	1260	AP Calculus II
Spring	2000	5910	Supervised Reading
Spring	2000	6220	Complex Analysis
Fall	2000	1250	AP Calculus I
Fall	2000	5310	Intro To Mod Alg I
Spring	2001	1260	AP Calculus II
Spring	2001	5320	Intro To Mod Alg II
Fall	2001	1250	AP Calculus I
Fall	2001	4510	Intro Topology
Spring	2002	1260	AP Calculus II
Spring	2002	3010	Topics-Hist Of Math
Fall	2002	1010	Intrm Algebra
Fall	2002	1250	AP Calculus I
Spring	2003	1010	Intrm Algebra
Spring	2003	1260	AP Calculus II
Fall	2003	1250	AP Calculus I
Fall	2003	6210	Real Analysis
Spring	2004	1260	AP Calculus II
Spring	2004	3010	Topics-Hist Of Math
Fall	2004	1250	AP Calculus I
Fall	2004	3220	Fndns Of Analysis II
Spring	2005	1260	AP Calculus II
Spring	2005	5210	Intro Real Analysis
Spring	2005	6910	Supervised Reading
Fall	2005	1250	AP Calculus I
Fall	2005	5910	Supervised Reading (Independent Study)
Spring	2006	3010	Topics-Hist Of Math (Special Topics)
Spring	2006	3210	Fndns Of Analysis I
Fall	2006	1250	AP Calculus I
Spring	2007	1260	AP Calculus II
Spring	2007	4530	Eucldn Curvs, Surfcs
Spring	2007	4999	Honors Thesis/Project (Honors Thesis Pro
Fall	2007	1010	Intrm Algebra
Fall	2007	1250	AP Calculus I
Spring	2008	1260	AP Calculus II
Spring	2008	3210	Fndns Of Analysis I
Spring	2008	6910	Supervised Reading (Independent Study)
Fall	2008	1210	Calculus I
Fall	2008	1250	AP Calculus I
Spring	2009	1260	AP Calculus II
Spring	2009	2200	Discrete Mathematics
Fall	2009	1250	AP Calculus I

Courses taught
1999-2017

SEMESTER	YEAR	COURSE_NO	COURSE_NAME
Summer	2010	1100	Quant Analysis
Summer	2010	3160	Appl Compl Var
Fall	2010	1250	AP Calculus I
Spring	2011	1260	AP Calculus II
Fall	2011	3010	Topics-Hist Of Math (Special Topics)
Spring	2012	1210	Calculus I
Spring	2012	6910	Supervised Reading (Independent Study)
Fall	2012	1250	AP Calculus I
Spring	2013	1260	AP Calculus II
Spring	2013	6220	Complex Analysis
Spring	2013	6910	Supervised Reading (Independent Study)
Fall	2013	1250	AP Calculus I
Spring	2014	1260	AP Calculus II
Spring	2014	6220	Complex Analysis
Fall	2014	1250	AP Calculus I
Spring	2015	1260	AP Calculus II
Spring	2015	2210	Calculus III
Fall	2015	1210	Calculus I
Fall	2015	1250	AP Calculus I
Spring	2016	1260	AP Calculus II
Spring	2016	5210	Intro Real Analysis
Fall	2016	1260	AP Calculus II
Fall	2016	3010	Topics-Hist Of Math (Special Topics)
Fall	2016	5910	Supervised Reading (Independent Study)
Spring	2017	5910	Supervised Reading (Independent Study)
Spring	2017	6220	Complex Analysis
Fall	2017	3010	Topics-Hist Of Math (Special Topics)