



Steven Kerckhoff

Robert Grimmett Professor of Mathematics, Emeritus

 Curriculum Vitae available Online

Bio

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Mathematics

ADMINISTRATIVE APPOINTMENTS

- Grimmett Professor of Mathematics, Stanford University, (2012- present)
- Professor, Stanford University, (1989- present)
- Chair, Stanford University, (2010-2013)
- Professeur Invite, Toulouse, (2008-2008)
- Professeur Invite, Orsay, (2008-2008)
- Professeur Invite, ENS, (2008-2008)
- Professeur Invite, Orsay, (2001-2001)
- Professeur Invite, ENS, (2001-2001)
- Visiting Professor, Princeton University, (1989-1990)
- Associate Professor, Stanford University, (1985-1989)
- Assistant Professor, Stanford University, (1981-1985)
- Lecturer, University of California, Berkeley, (1979-1981)
- Sloan Fellowship, Alfred P. Sloan Foundation, (1984-1986)
- Postdoctoral Fellowship, American Mathematical Society, (1978-1979)

HONORS AND AWARDS

- Dean's Award for Teaching, Stanford University (1983-1984)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, IRES (2008 - 2008)
- Member, IRES (2001 - 2001)
- Member, IRES (2002 - 2002)
- Member, Institute for Advanced Study (1989 - 1990)
- Member, Mathematical Sciences Research Institute, Berkeley (1984 - 1985)
- Member, Institute for Advanced Study, Princeton (1983 - 1984)
- Member, Institute for Advanced Study (1978 - 1979)

- Trustee, Mathematical Sciences Research Institute (1992 - 1999)
- Chair, MSRI, Committee of Academic Sponsors (1996 - 1999)
- Editor, Pacific Journal (1988 - 1998)
- Mathematics Standards for K-12 Education, consultant, State of California Board of Education (1988 - 1999)
- Content Review Panel for K-8 Mathematics Textbooks, member, State of California Board of Education (1999 - 1999)
- Content Review Panel for K-8 Mathematics Textbooks, member, State of California Board of Education (2000 - 2000)

PROFESSIONAL EDUCATION

- B.A., Harvard University (1974)
- M.A., Princeton University (1975)
- Ph.D., Princeton University (1978)

Teaching

COURSES

2022-23

- Algebraic Topology: MATH 148 (Win)
- Fundamental Concepts of Analysis: MATH 171 (Spr)
- Low Dimensional Topology: MATH 282A (Spr)

Publications

PUBLICATIONS

- **Local rigidity of hyperbolic manifolds with geodesic boundary** *JOURNAL OF TOPOLOGY*
Kerckhoff, S. P., Storm, P. A.
2012; 5 (4): 757-784
- **From the hyperbolic 24-cell to the cuboctahedron** *GEOMETRY & TOPOLOGY*
Kerckhoff, S. P., Storm, P. A.
2010; 14 (3): 1383-1477
- **"Thurston's geometrization conjecture** *Clay Foundation Annual Report*
kerckhoff, S. P., Gabai, D.
2009: 32-38
- **The shape of hyperbolic Dehn surgery space** *GEOMETRY & TOPOLOGY*
Hodgson, C. D., Kerckhoff, S. P.
2008; 12: 1033-1090
- **Universal bounds for hyperbolic Dehn surgery** *ANNALS OF MATHEMATICS*
Hodgson, C. D., Kerckhoff, S. P.
2005; 162 (1): 367-421
- **Harmonic deformations of hyperbolic 3-manifolds** *Kleinian Groups and Hyperbolic 3-Manifolds*
Kerckhoff, S. P., Hodgson, C.
edited by Komori, Y., Markovic, V., Series, C.
Cambridge University Press.2003
- **Three dimensional orbifolds and cone manifolds** *Monograph*
Kerckhoff, S. P., Cooper, D., Hodgson, C.
2000

- **Rigidity of hyperbolic cone-manifolds and hyperbolic Dehn surgery** *JOURNAL OF DIFFERENTIAL GEOMETRY*
Hodgson, C. D., Kerckhoff, S. P.
1998; 48 (1): 1-59
- **Deformations of hyperbolic cone-manifolds** *Proceedings of the 37th Taniguchi Symposium on Topology and Teichmuller Spaces*
Kerckhoff, S. P.
edited by Kojima, S.
1996
- **LINES OF MINIMA IN TEICHMULLER SPACE** *DUKE MATHEMATICAL JOURNAL*
Kerckhoff, S. P.
1992; 65 (2): 187-213
- **THE MEASURE OF THE LIMIT SET OF THE HANDLEBODY GROUP** *TOPOLOGY*
Kerckhoff, S. P.
1990; 29 (1): 27-40
- **NON-CONTINUITY OF THE ACTION OF THE MODULAR GROUP AT BERS BOUNDARY OF TEICHMULLER SPACE** *INVENTIONES MATHEMATICAE*
Kerckhoff, S. P., Thurston, W. P.
1990; 100 (1): 25-47
- **ERGODICITY OF BILLIARD FLOWS AND QUADRATIC-DIFFERENTIALS** *ANNALS OF MATHEMATICS*
KERCKHOFF, S., Masur, H., Smillie, J.
1986; 124 (2): 293-311
- **A RATIONAL BILLIARD FLOW IS UNIQUELY ERGODIC IN ALMOST EVERY DIRECTION** *BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY*
KERCKHOFF, S., Masur, H., Smillie, J.
1985; 13 (2): 141-142
- **Simplicial Systems for Interval Exchange Maps and Measured Foliations** *Ergodic Theory and Dynamical Systems*
Kerckhoff, S. P.
1985; 5: 257-271
- **EARTHQUAKES ARE ANALYTIC** *COMMENTARII MATHEMATICI HELVETICI*
Kerckhoff, S. P.
1985; 60 (1): 17-30
- **THE NIELSEN REALIZATION PROBLEM** *ANNALS OF MATHEMATICS*
Kerckhoff, S. P.
1983; 117 (2): 235-265
- **The Geometry of Teichmuller Space** *Proceedings of the International Congress of Mathematicians*
Kerckhoff, S. P.
1983: 665-678
- **THE NIELSEN REALIZATION PROBLEM** *BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY*
Kerckhoff, S. P.
1980; 2 (3): 452-454
- **ASYMPTOTIC GEOMETRY OF TEICHMULLER SPACE** *TOPOLOGY*
Kerckhoff, S. P.
1980; 19 (1): 23-41