

CURRICULUM VITAE

JEAN BEE CHAN

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RANK: Professor of Mathematics

EDUCATION

1971 Ph.D. Mathematics, University of California, Los Angeles

1961 M.S. Mathematics, University of Chicago

1960 B.S. Mathematics, University of Chicago

TEACHING EXPERIENCE

1983-present Sonoma State University, Professor of Mathematics

Chair of Department (1986-89; Spring, 1990; 1998-2001)

1977-1983 Sonoma State University, Associate Professor of Mathematics

1973-1977 Sonoma State University, Assistant Professor of
Mathematics

1971-1973 Loyola University, L.A., Lecturer (1971-72); Assistant Professor (1972-73)

Spring, 1971 UCLA, Lecturer

HOME

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SELECTED PUBLICATIONS

Books and Manuscripts:

- *Geometry with Projects and Explorations*, with Brannen, Pearson Custom Publishing, July ,2009
- *Geometry with Projects and Explorations*, with Brannen, manuscript printed and bound as text for 5 sections of general education geometry course at SSU, 2001-S' 2009
- *College Geometry*, manuscript printed and bound as text for an upper division geometry course at SSU, F'07
- *Discrete Mathematics with Applications*, with Barnier, published by West Publishing Company, February, 1989

Papers:

- "Newton and Nonstandard Analysis," under preparation, 2007
- "Musings on the Two-Body Problem," *FOCUS* of the Mathematical Association of America, 2005.
- "Differences in Arithmetic Nomenclature," *Changing Faces of Mathematics*, published by the National Council of Teachers of Mathematics, 1999.
- "What's in it for Students at Joint Meetings?" *FOCUS* of the Mathematical Association of America, 1997
- "A Krasnosel'skii-type Theorem Involving p-arcs," *Proceedings, a journal of the American Mathematical Society*, Vol. 102, No. 3, Whole Number 345, p. 667-676, 1988
- "Arcwise Convexity of the p-kernel," *Proceedings of the International Congress for Mathematicians*, 1987
- "A Characterization of Starshaped Sets," *Zentralblatt fur Mathematik*, Germany, Vol. 357.52009, 1978
- "A Characterization of Starshaped Sets in E_n ," *Canadian Journal of Mathematics*, Vol. XXIX, No. 1, 1977

- "Characterization of Strictly Monotone Sets," *Proceedings, a journal of the American Mathematical Society*, Vol. 64, No. 1, 1977
- "A Krasnosel'skii-type Theorem on p-arcs in the Euclidean Plane," *American Mathematical Society Notices*, Vol. 24, No. 2, Issue No. 176, 1977
- "Tietze-type Theorems on monotone Increasing Sets," *Proceedings, a journal of the American Mathematical Society*, Vol. 54, 1976.
- "Tietze-type Theorems on Monotone Increasing Set," *Proceedings, a journal of the American Mathematical Society*, Vol. 54, Whole No, 199, 1976
- "A Tietze-type Theorem on Monotone Increasing Sets," *American Mathematical Society Notices*, Vol. 18, No. 4, Issue No. 130, 1971
- "Generalized Convexity and Globalization," *American Mathematical Society Notices*, Vol. 18, No. 1, Issue No. 127, 1971

PRESENTATIONS AND TALKS (Partial List)

- "Higher Math: An Introduction," accepted for presentation at the American Mathematical Society and the Mathematical Association of America (AMS and MAA) Annual Joint Meetings in San Diego, January, 2008
- "Geometric Plums," SSU Math Seminar, Fall, 2007
- "Magic Squares," Public talk, Darwin Hall Open House, SSU, 2006
- "How to Keep Research Alive," AMS and MAA Annual Joint Meetings, 2006
- "A View of an Art Gallery," Northern California, Nevada, and Hawaii Section of the Meeting at Stanford University, February 25, 2006
- "The Four Color Theorem and the Art Gallery Theorem," keynote address for the Illinois Section of the MAA Meeting at Knox College, April 9, 2005
- "The Magic Hexagon," banquet address for the Rocky Mountain Section of the MAA Meeting at the Northern Colorado University, April 15, 2005
- "How Should We View an Art Gallery?" Keynote address for the Rocky Mountain Section of the MAA Meeting at the Northern Colorado University, April 16, 2005

- "How Does your Orchard Grow?" Colloquium talk at Cal. State University, East Bay, 2004
- "The Art Gallery Problem," M*A*T*H Colloquium, SSU, Fall, 2002
- "How to Attract and Retain More Math Majors," MAA MathFest, Madison, 2001
- "Elliptic Curves," SSU Math Research Seminar, Spring, 2001
- "Modular Forms and Eisenstein Series," SSU Math Research Seminar, Fall, 2001
- "Advising Math Majors," AMS and MAA Annual Joint Meetings, New Orleans, LA, 2001
- "All or Nothing - Experiments versus Proofs," M*A*T*H Colloquium, SSU, Spring, 2000
- "A Gallery of Geometric Gems," California Council of Math Community Colleges Conference, South Tahoe, 1998; M*A*T*H Colloquium, SSU, 1997
- "Using Algebra to Find Magic Hexagons," Santa Clara Mathematics Council meeting, 1997
- "Is There Magic in Hexagons?" California Council of Math Community Colleges Conference, 1996
- "Magic Hexagons," M*A*T*H Colloquium, SSU, 1995
- "The Orchard Problem," M*A*T*H Colloquium, SSU, 1994
- "Empowering Students through the Faculty Mentors Program," AMS and MAA Annual Joint Meetings, 1993
- "The Maximum Trunk Radius," colloquium talk at San Jose University, 1993
- "The Density of Packing," Pacific Union College, 1992
- "How to Initiate and Maintain a Mathematics Department Colloquium," AMS and MAA Annual Joint Meetings, 1992
- "Convex Sets and Starshaped Sets," Santa Clara University, 1991
- "Applications of Discrete Mathematics in Computer Science," AMS and MAA Annual Joint Meetings, 1990

- "Active Learning Participation Method in Mathematics," AMS and MAA Annual Joint Meetings, 1989
- "Packing Spheres and Density," National Council of Teachers of Mathematics, February, 1989
- "Packing Density in E_n for $n = 1, \dots, 24$," invited hour speech for the Conference of the National Council of Teachers of Mathematics, 1989
- "Active Learning Participation Method in Mathematics," paper presented at the Annual Joint Meeting of the AMS and the MAA, 1989
- "Packing spheres and Density," talk given at the National Council of Teachers of Mathematics, February, 1989
- "Packing Spheres and Finite Simple Groups," colloquium talk at SSU, 1988
- "The Arcwise Convexity of the p -Kernel," paper presented at the International Congress for Mathematicians, 1986
- "Generalized Starshaped Sets in E_n ," colloquium talk at San Jose State University, 1986
- "Arcwise Convexity," colloquium talk at San Francisco State University, 1986
- "Women and Mathematics, History and Current Status," talk at Women's Studies Seminar, SSU, 1986
- "Euler's Theorem and Convex Polyhedra," colloquium talk at Solano Community College Conference, 1986
- "Non-Euclidean Geometry," paper presented at the Summer Joint Meeting of the AMS and the MAA, 1985
- "Globalization and Convexity," research seminar talk at the University of California, Davis, 1984
- "Packing Density in E_n for $n = 1, \dots, 24$," invited hour speech for the Conference of the National Council of Teachers of Mathematics, 1989
- "Active Learning Participation Method in Mathematics," paper presented at the Annual Joint Meeting of the AMS and the MAA, 1989

- "Packing spheres and Density," talk given at the National Council of Teachers of Mathematics, February, 1989
- "Packing Spheres and Finite Simple Groups," colloquium talk at SSU, 1988
- "The Arcwise Convexity of the p-Kernel," paper presented at the International Congress for Mathematicians, 1986
- "Generalized Starshaped Sets in E_n ," colloquium talk at San Jose State University, 1986
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- "Women and Mathematics, History and Current Status," talk at Women's Studies Seminar, 1986
- "Euler's Theorem and Convex Polyhedra," colloquium talk at Solano Community College, 1986
- "Non-Euclidean Geometry," paper presented at the Summer Joint Meeting of the AMS and the MAA, 1985
- "Globalization and Convexity," research seminar talk at the University of California, Davis, 1984

RECENT SERVICE TO THE DEPARTMENT AND UNIVERSITY (Partial List)

- Committee to form a math co-major program for students who plan to have a double major including a math major, 2007-present
- Organizer and participant of the Graph Theory Research Group for faculty and students, Fall, 2007
- Coordinator of meetings of SSU Math Faculty and local high schools, 2007
- Organizer of the new Emeritus Math faculty Monthly Lunch, 2007-2009
- Faculty Advisor of Pi Mu Epsilon Honorary Math Society SSU Chapter, the California Nu (2003-present)
- Editor and Coordinator of the Mathematics Departmental Newsletter, 2005- 2008

- Chair of Mathematics Department (1998-2001; Spring, 1990; 1986-89)
- Coordinator of the Developmental Mathematics Program, 2001- 2003
- Member of the SSU Academic Foundation Board (1998-present)
- Member of Committees on Mathematics Faculty Search (several years)
- Member or Chair of Mathematics Curriculum Development and Revision (for several years)
- Founder (1988) and Organizer of Annual Mathematics Festival (for several years)
- Founder and Organizer of General Education Mathematics Posters Competition (for several years)
- Founder (1974) and Organizer (for several years) of M*A*T*H Colloquium.
- Founder (1985) and Faculty Advisor (for many years) of SSU Math Club
- Founder of the Pi Mu Epsilon Honorary Math Society SSU Chapter, the California Nu, 1999
- Recipient and Project Director of National Science Foundation Equipment Grant for a Mathematics Computer Laboratory (to introduce computer graphing component to mathematics courses), 1988-1991
- Member of Search Committee for SSU Vice President of Development (2002)
- SSU Faculty Mentor for SSU Underrepresented Students, 1988-1999
- University Scholarship Committee Member (1997-2003)
- Education Policy Council (for several years as former member and chair)

RECENT SERVICE TO THE MATHEMATICAL COMMUNITY (Partial List)

- Mathematical Association of America (MAA) Vice President, 2004-2006
- MAA National Executive Committee, 2004-2006
- MAA Board of Governors, 2001-2004
- MAA Northern California Section Governor, 1999-02

- External Reviewer of Mathematics Department, San Francisco State University, 1999
- MAA Northern California, Nevada, and Hawaii Section Program Chair, 1998-99; Chair, 1997-98; Vice-Chair, 1996-97
- Organizer of MAA Northern California Section Conference, 1999
- Organizer and Chair of Two Paper Sessions on "Mentoring Mathematics Students," July, 1998, MAA MathFest, Toronto
- Member of the National MAA Committee on Undergraduate Student Activities and Chapters, 1996-2005; Co-Chair, 2002-03
- External Reviewer of Mathematics Department, CSU, Chico, 1993
- Member of the National MAA Development Committee, 1993-02
- Advanced Placement Calculus Committee of the National College Board, Member, 1991-92
- The California State University (CSU) System Entry Level Mathematics (ELM) Development Committee Chair, 1989-1990, Member, 1986-1992
- Director of the Northern California Region Women and Mathematics
- Visiting Speaker to K-12 schools in Marin and other Northern California Counties for the MAA Women and Mathematics (WAM) Program, 1974-present; WAM Program Director, 1987-1990
- Member of the National MAA Visiting Lecturers Committee, 1990-96
- Member of the National MAA Membership Committee, 1990-96
- Member of the CSU Institute for Teaching and Learning Mathematics Steering Committee, 1988-1990
- Member of the Organizing Committee of the Second International Graph Theory Conference, 1989
- Host and Organizer of the 50th anniversary meeting of the MAA Northern California Section, 1989

- Founding editor of the newsletter, *The Mathematics Connection*, of the CSU Institute for Teaching and Learning in Mathematics, 1989
- External Reviewer of the Learning Center, CSU Northridge, 1988

GRANT AWARDS

- MAA Travel Grant for student poster presenters at the Joint Mathematics Meetings at San Diego, 2002
- MAA Student Chapter Grant for travel expenses of student poster presenters at Northern California, Nevada, and Hawaii Section of the MAA, 1997-2002
- The California State University Research, Scholarship, and Creative Activities Program Grant, 1994
- The California State University Summer Research Grant to study the national crisis in calculus teaching, 1991
- National Science Foundation Equipment Grant for a Mathematics Computer Laboratory, recipient and project director, 1988-1991

RECENT SERVICE TO THE COMMUNITY (Partial List)

- The Press Democrat Youth Service Award Founding and Continuing Judge, 1989-present
- Performer as a Mandarin Singer for the annual Cultural Diversity Festivals at Santa Rosa Finley Community Center and at Sebastopol Community Center, 2007- present
- Board Member of Asian American Alliance of Marin, 1985-present; Co-president, 2004 - present
- Project Director of Main Arts Council Community Art Grants to produce the Asian Pacific Heritage Festival at the Bay Area Discovery Museum for over 2000 Bay Area children and adults; 1999-present
- Founder and Board Member of Asian Scholarship Fund, 1995-present (The Fund awards scholarships to high school seniors in Marin and Sonoma Counties totaling more than \$12,000 each year.) President, 1995-97; Co-President, 1997-98; board member 1995- present.

- Board Member of the Marin Education Fund (The Scholarship Agency of the Marin Community Foundation), 1993-1999
- Organizer and/or Workshop Leader for the Expanding Your Horizon Conferences for junior high school students in Marin (as organizer and workshop leader) and Sonoma County (as workshop leader), 1981- 2002
- Volunteer Mathematics Tutor and Mentor to children in Corte Madera, Marin City, San Rafael, and other areas in Marin and Sonoma Counties, 1973 - present
- The Press Democrat Youth Service Award founding and continuing Judge, 1989-present
- Advisory Board Member of the Marin Independent Journal, 1994-95
- Visiting Speaker to K-12 schools in Marin and other Northern California Counties for the MAA National Women and Mathematics Program, 1974-1984
- Marin Chinese Cultural Association, President, 1976-77; Board Member, 1996-present

AWARDS AND HONORS

- Certificate of Honor from UCLA for being nominated for the UC/CSU Outstanding Mentor Award , 2006
- Santa Rosa Chamber of Commerce Excellence in Education Award, 2002
- Sonoma State University Excellence in Teaching Award, 2002
- Marin Women's Hall of Fame Honoree, 1998
- Marin County Martin Luther King, Jr. Humanitarian Award, 1996