**NAN JIANG**

**Associate Professor**

**Department of Mathematical Sciences**

**EDUCATION**

**PhD,** **Mathematics**, Kansas State University, 2000

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| Area of Specialization: | Numerical Analysis |
| Dissertation: | *On Wavewise Entropy Inequalities for High-Resolution Schemes with Source Terms I: The Semi-Discrete Case* |

Advisor: Huanan Yang

**MS,** **Computer Science**, Kansas State University, 2002

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| Thesis: | *Adapting PAGS (Parallel Adaptive Grid Simulation) as a Software Framework for Solving Systems of Linear Equations* |

Advisor: Virgil Wallentine

**MS,** **Mathematics**, Kansas State University, 1997

**BS,** **Mathematics**, Guizhou University, P. R. China, 1982

**PROFESSIONAL EXPERIENCE**

**Associate Professor**, University of South Dakota

Department of Mathematical Sciences, 5/2008-present

**Assistant Professor**, University of South Dakota

Department of Mathematical Sciences, 8/2002- 5/2008

**Graduate Teaching/Research Assistant**, Kansas State University

Department of Mathematics/Computing & Information Science, 1995-2000/2001-2002

**Lecturer**, Guizhou University for Nationalities, P. R. China

Department of Mathematics, 1982-1994

**TIME ALLOCATION FOR EVALUATION PURPOSES**

2010-2012 2008-2009

Teaching: 60% Teaching: 60%

Research: 20% Research: 25%

Service: 20% Service: 15%

**PUBLICATIONS**

1. **Nan Jiang**, *The Convergence of α Schemes for Conservation Laws II: Fully-Discrete Case* accepted to publish, (2013), Journal of Methods and Applications of Analysis (International Press).
2. T. R. Tsai, Y. L. Lio, **Nan Jiang**, *Optimal Decisions on the Accelerated Degradation Test Plan under the Wiener Process,* accepted to publish, (2013), International Journal of Quality Technology and Quantitative Management
3. D. G. Chen, Y. L. Lio, **Nan Jiang**, *Lower Confidence Limits on the Generalized Exponential Distribution Percentiles under Progressive Type-I Interval Censoring*, Journal of Communications in Statistics - Simulation and Computation, Vol. 42, (2013) pp. 2106-2117.
4. **Nan Jiang**, *The Convergence of α Schemes for Conservation Laws I: Semi-Discrete Case*, Journal of Methods and Applications of Analysis (International Press), Vol. 19, No. 4 (2012) pp. 341-358.
5. Y. L. Lio, T. R. Tsai, M. Aslam, **Nan Jiang**, *Control Charts for Monitoring Burr Type X Percentiles,* Journal of Communications in Statistics - Simulation and Computation, accepted to publish, (2012), pp. 1-16.
6. **Nan Jiang**, *Extremum Traceableness of the TVB Schemes*, Essays on Mathematics and Statistics (ISBN: 978-960-9549-73-8, Proceedings of the 2nd International Conference on Math and Statistics Jun., 2008, Athens, Greece), Vol. 2, (2012) pp. 55-67.
7. **Nan Jiang**, *On the Convergence of Semi-Discrete High Resolution Schemes with Superbee Flux Limiter for Conservation Laws,* Series in Contemporary Applied Mathematics CAM 18, Hyperbolic Problems (Theory, Numerics and Applications), Vol. 2, (2012) pp. 431-438.
8. **Nan Jiang**, *On the Convergence of Fully-Discrete High-Resolution Schemes with van Leer’s Flux* *Limiter for Conservation Laws*, Journal of Methods and Applications of Analysis (International Press), Vol. 16, No. 3 (2009) pp. 403-422.
9. **Nan Jiang**, Huanan Yang, *On Convergence of Semi-Discrete High Resolution Schemes with van Leer's Flux Limiter for Conservation Laws*, Journal of Methods and Applications of Analysis (International Press), Vol. 12, No. 1 (2005) pp. 089-102.
10. Huanan Yang, **Nan Jiang**, *On Wavewise Entropy Inequalities for High-Resolution Schemes with Source Terms I: The Semi-Discrete Case*, Journal of Methods and Applications of Analysis (International Press), Vol. 10, No. 4 (2003) pp. 487-512.
11. **Nan Jiang**, *Adapting PAGS (Parallel Adaptive Grid Simulation) as a Software Framework for Solving Systems of Linear Equations,* M.S. Thesis in Computer Science, Kansas State University, Aug. (2002) pp. 1-59.
12. **Nan Jiang**, Yong Lin, *On the Unicity Theorems of the Meromorphic Functions*, Journal of Fujian Normal University, P. R. China, Vol. 4, No. 1 (1988) pp. 33-38.
13. **Nan Jiang**, *On a Rotation Theorem of Subordinate Functions*, Journal of Fujian Normal University, P. R. China, Vol. 2, No. 2 (1986) pp. 17-24.
14. **Nan Jiang**, *On a Property of Meromorphic Functions*, Journal of Fujian Normal University, P. R. China, Vol. 2, No. (1985) pp. 19-22.

**SUBMITTED PAPERS**

1. [Rezac, Joseph Michael](https://exchange.usd.edu/owa/?ae=Item&t=IPM.Note&id=RgAAAAAMisKuZPWpSaVx91%2fYPhBjBwDQNyYudhcIRbFBcAcveP3VAAAFHwABAACgcR7RQHEFSKWuWFj8D1VIAIPUwCZmAAAJ), Y. L. Lio, **Nan Jiang**, *Burr Type-II Percentile Control Charts*, (submitted), 2013
2. T. R. Tsai, Y. L. Lio, **Nan Jiang,** Y. J. Lin,Y. Y. Fan, *Economical Sampling Plans with Warranty from Truncated Data for the Burr Type XII Distribution,* (submitted), 2013.
3. **Nan Jiang,** *The Convergence of a Class of Third Order Schemes for Conservation Laws* (submitted), 2013.
4. T. R. Tsai, **Nan Jiang**, Y. L. Lio, *Economic Design of the Life Test with a Warranty Policy* (submitted), 2013.
5. **Nan Jiang***,* T. R. Tsai, Y. L. Lio, D. G. Chen, *Implementing Statistical Inference for Burr Type-XII Distribution Based on Sequential Order Statistics* (submitted), 2012.
6. Y. L. Lio, T. R. Tsai, **Nan Jiang**, *Statistical Inference for Gompertz Model Based on Sequential Order Statistics from a Dynamic System* (submitted), 2012.

**RESEARCH IN PROGRESS**

1. **Nan Jiang,** *Semi-Discrete* *β Schemes and Their Entropy Convergence*, on-going, 2013.
2. **Nan Jiang,** *On Wavewise Entropy Inequalities for High-Resolution Schemes with Source Terms II: The Fully-Discrete Case*, on-going, 2013.

**PROFESSIONAL ACTIVITIES**

1. External Reviewer (invited), for tenure and promotion application of a candidate at the Department of Mathematical Sciences of Indiana University, 2013.
2. Judge, for South Dakota Science Olympiad State Tournament, 2013, 2012，2011, 2010, 2009, 2008, 2007, 2006.
3. Session Chair, the 2nd International Conference on Math and Statistics, Athens, Greece, June 16-19, 2008.
4. Author, “Math Praxis Review in Discrete Mathematics” for South Dakota Board of Regents, 2005.
5. Visiting Scholar, Department of Mathematics, Kansas State University-Manhattan Campus, Summer 2005, 2004, 2003.
6. Session Chair, the 3rd Hawaii International Conference on Statistics and Mathematics, June 9-12, 2004.
7. Manuscript Reviewer, for *Discrete Mathematics Primer,* McGraw-Hill Publishers, 2004.
8. Book Reviewer, McGraw-Hill Publishers, for *Discrete Mathematics and Its Applications*, 5th edition, by Rosen, pre-revision review, 2004.
9. Book Reviewer (McGraw-Hill), Comparative Review:Rosen’s *Discrete Mathematics with Applications, Fifth Edition* (©2003, McGraw-Hill)vs. Epp’s *Discrete Mathematics, Second Edition* (© 1995, Thomson), 2003.

**Departmental Seminars:**

1. Seminar Speaker, “Discover Research Projects from Calculus,” Mar. 27, 2013.
2. Seminar Speaker, “Convergence Analysis of the Method of Lines - a Family of Second to Third Order Accuracy Schemes,” Feb. 20, 2013
3. Seminar Speaker, “Root Finding and Much More - for Nonlinear Problems,” Dec. 8, 2010.
4. Seminar Speaker, “The Convergence of a Class of Methods - Semi-Discrete Case,” April 14, 2010.
5. Seminar Speaker, “Conservative Schemes and Sweby’s Conjecture,” April 2007.
6. Seminar Speaker, “Extension of the WEI (Wavewise Entropy Inequalities) Framework and the Convergence Analysis of the MUSCL (Monotonic Upstream-Centered Scheme for Conservation Laws) Schemes,” April 2006.
7. Seminar Speaker, “A Class of High Resolution Schemes and the Convergence Analysis,” March 2005.

**ABSTRACT PUBLISHED**

1. Nan, Jiang, “The Convergence of a Class of Third Order Schemes for Conservation Laws,” Oct. 18, 2013
2. Nan Jiang, “On the Convergence of α Schemes,” Oct. 18, 2012.
3. Nan Jiang, “On the Convergence of Semi-Discrete High Resolution Schemes with Superbee Flux Limiter for Conservation Laws,” June 14, 2010.
4. Nan Jiang, “On the Convergence of Fully-Discrete High-Resolution Schemes with van Leer’s Flux Limiter for Conservation Laws,” Jan. 14, 2010.
5. Nan Jiang, “Extremum Traceableness of the TVB Schemes,” Jun., 16, 2008.
6. Nan Jiang, “Flux Limiter Methods for Conservation Laws,” May, 21, 2007.
7. Nan Jiang, “Conservative Schemes and Sweby’s Conjecture,” April 2007.
8. Nan Jiang, “On Convergence of Semi-Discrete High Resolution Schemes with van Leer’s Flux Limiter for Conservation Laws,” Sep. 25, 2006.
9. Nan Jiang, “Extension of the WEI Framework and the Convergence Analysis of the MUSCL (Monotonic Upstream-Centered Scheme for Conservation Laws) Schemes,” April 2006.
10. Nan Jiang, “WEI (Wavewise Entropy Inequalities) Approach and the Convergence of Semi-Discrete High Resolution Schemes with Flux Limiter for Conservation Laws,” May 20, 2005.
11. Nan Jiang, “A Class of High Resolution Schemes and the Convergence Analysis,” March 2005.
12. Nan Jiang, “On Wavewise Entropy Inequalities for High-Resolution Schemes with Source Terms I: the Semi-Discrete Case,” June 9, 2004.
13. Nan Jiang, “Conservative Schemes and Convergence Analysis by the Methods of WEI (Wavewise Entropy Inequalities) vs. CEI (Cell Entropy Inequalities),” March 28, 2003.

**CONFERENCE/ PROFESSIONAL PRESENTATIONS**

1. Nan Jiang, “The Convergence of a Class of Third Order Schemes for Conservation Laws” at National Joint Mathematics Meetings, Baltimore, MD January 15, 2014.
2. Nan Jiang, “On the Convergence of α Schemes” at National Joint Mathematics Meetings, San Diego, CA January 11, 2013.
3. Nan Jiang (Invited speaker), “How to Develop an Undergraduate Research Project,” at the College of Science of the Guizhou Minzu University, P. R. China, June 26, 2012.
4. Nan Jiang, “On the Convergence of Semi-Discrete High Resolution Schemes with Superbee Flux Limiter for Conservation Laws,” at the Thirteenth International Conference on Hyperbolic Problems: Theory, Numeric and Applications, Beijing, China, June 16, 2010.
5. Nan Jiang (Invited speaker), “A Class of Semi-Discrete Schemes and the Convergence Analysis,” at the College of Science of the Guizhou University, P. R. China June 3, 2010.
6. Nan Jiang (Invited speaker), “My Recent Results in a Family of Open Problems,” at the College of Science of the Guizhou Kaili University, P. R. China May 27, 2010.
7. Nan Jiang (Invited speaker), “Mathematics and its Applications,” at the College of Sciences of the Guizhou University for Nationalities, P. R. China May 21, 2010.
8. Nan Jiang, “A Follow up on the Sweby's Conjecture -My Solution in the Fully-Discrete Case” at Mathematical Association of America, Nebraska/Southeast South Dakota Section Meetings, April 9-10, 2010.
9. Nan Jiang, “On the Convergence of Fully-Discrete High-Resolution Schemes with van Leer’s Flux Limiter for Conservation Laws” at National Joint Mathematics Meetings, San Francisco, CA January 14, 2010.
10. Nan Jiang (Invited speaker), "American vs. Chinese Higher Education System," at School of Mathematics and Computer Science, Guizhou University for Nationalities, P. R. China June 27, 2008.
11. Nan Jiang (Plenary section speaker and Section Chair), “Extremum Traceableness of the TVB Schemes,” at the 2nd International Conference on Math and Statistics Athens, Greece 16-19, June 2008.
12. Nan Jiang (Plenary section speaker), “Flux Limiter Methods for Conservation Laws: Fully Discrete Schemes,” NSF/CBMS Regional Research Conference on Numerical Methods for Nonlinear Elliptic Equations, University of Iowa, May 21-25, 2007.
13. Nan Jiang (Plenary section speaker), “On Convergence of Semi-Discrete High Resolution Schemes with van Leer’s Flux Limiter for Conservation Laws,” International Conference on Numerical Analysis and Optimization, Institute of Computational Mathematics, Chinese Academy of Sciences, Beijing, Sept. 25-28, 2006.
14. Nan Jiang (Plenary section speaker), “WEI (Wavewise Entropy Inequalities) Approach and the Convergence of Semi-Discrete High Resolution Schemes with Flux Limiter for Conservation Laws,” Midwest Numerical Analysis Conference, University of Iowa, May 20-22, 2005.
15. Nan Jiang (Section Chair), “On Wavewise Entropy Inequalities for High-Resolution Schemes with Source Terms I: The Semi-Discrete Case,” The 3rd Hawaii International Conference on Statistics and Mathematics, June 9-12, 2004.
16. Nan Jiang, “Conservative Schemes and Convergence Analysis by the Methods of WEI (Wavewise Entropy Inequalities) vs. CEI (Cell Entropy Inequalities),” Mathematical Association of America, Nebraska/Southeast South Dakota Section Meetings, March 28-29, 2003.

**CONFERENCES ATTENDED**

1. National Joint Mathematics Meetings, San Diego, CA January 9-12, 2013.
2. International Conference on Computational Science (ICCS2012), Shanghai, China, July 16-20, 2012.
3. Mathematics on the Northern Plains Conference, Mount Marty College, SD, April 21, 2012.
4. National Joint Mathematics Meetings, Boston, MA, January 4-7, 2012.
5. The Thirteenth International Conference on Hyperbolic Problems: Theory, Numeric and Applications, Beijing, China, June 15-19, 2010.
6. The 11th Annual Mathematics on the Northern Plains Undergraduate Conference 2010, Morningside College, Sioux City, Iowa, April 17, 2010.
7. National Joint Mathematics Meetings, San Francisco, CA, January 10-14, 2010.
8. South Dakota/Wyoming EPSCoR State Conference 23-24, September 2009, Rapid City, SD.
9. The 2nd International Conference on Math and Statistics Athens, Greece, Jun. 16-19, 2008.
10. NSF/CBMS Regional Research Conference on Numerical Methods for Nonlinear Elliptic Equations, University of Iowa, May 2007.
11. Mathematics on the Northern Plains Conference, University of South Dakota, April 2007, 2006, 2003.
12. International Conference on Numerical Analysis and Optimization, Institute of Computational Mathematics, Chinese Academy of Sciences, Beijing, China, September 2006.
13. 1011th American Mathematical Society (AMS) Central Section Fall Meeting, University of Nebraska-Lincoln, October 2005.
14. South/North Dakota EPSCoR 5thBiennial Joint Conference, Brookings, SD, September 2005.
15. Midwest Numerical Analysis Conference, University of Iowa, May 2005.
16. Mathematical Association of America (MAA) Nebraska-Southeastern South Dakota Section Meetings: University of Nebraska-Lincoln, April, 2005; University of South Dakota, Oct., 2003, and April 2010.
17. National Science Foundation (NSF) Day of South Dakota, School of Mines and Technology, SD, September 2004.
18. The 3rd Hawaii International Conference on Statistics and Mathematics, Honolulu, June 2004.
19. Sixth Annual Mathematics on the Northern Plains Undergraduate Conference, Mathematics & Computer Science Department of Dordt College, Sioux Center, April 2004.

**WORKSHOPS ATTENDED**

1. Center for Teaching and Learning of USD - Google Sites and Bright Ideas, January 28, 2013
2. Mathematical Association of America - Getting Students Involved in Undergraduate Research, January 9 -12, 2013, San Diego, CA
3. Center for Teaching and Learning of USD - D2L Grade Book, December 17, 2012
4. Center for Teaching and Learning of USD - Assessment, November 20, 2012
5. USD Physics Department - CUBED Workshop and NSF Proposal Planning, October 3, 2012
6. USD Office of Research & Sponsored Programs - How to Better Position Yourself as a Scholar, Researcher, and Grant Writer, December 1, 2011
7. Center for Teaching and Learning of USD - Workshop on Programmatic Assessment, November 15, 2011
8. USD Physics Department - Center for Ultra-Low Background Experiments at DUSEL, November 6, 2011
9. American Mathematics Society - An Introduction to Numerical and Statistical Modeling, Jan. 11-12, 2010, Joint Mathematics Meetings, San Francisco, CA

**GRANTS**

1. USD PI, South Dakota NASA EPSCoR Program 2013−2014 Research Initiation Grants ($15,274). Collaborative Research Proposal (SDSU & USD): “Theory and Model of Remaining Useful Life Assessment for Aerospace Batteries.” submitted Mar. 15, 2013. Not funded.
2. Awarded College of Arts & Sciences Travel Grant ($900), October 3, 2012, in support of the paper presentation at National Joint Mathematics Meetings, San Diego, CA Jan. 9-12, 2013.
3. Awarded CTL Teaching Improvement Grant ($1000), Sept. 27, 2012, in support of attending MAA Mini-courses at National Joint Mathematics Meetings, San Diego, CA January 2013.
4. USD PI, South Dakota NASA EPSCoR Program 2010−2012 Research Initiation Grants ($49,981). Collaborative Research Proposal (SDSU & USD): “Theory of Remaining Useful Life Assessment and the Reliability Odometer Based on Real-Time Observations of System Performance.” submitted Dec. 1, 2010. Not funded.
5. Awarded College of Arts & Sciences Travel Grant ($900), October 12, 2009, in support of the paper presentation at National Joint Mathematics Meetings, San Francisco, CA January 2010.
6. Awarded College of Arts & Sciences Travel Grant ($800), February 12, 2008, in support of the paper presentation at Athens, Greece, June 2008.
7. University of South Dakota Research Council Travel Grant ($500), in support of paper presentation at the Numerical Analysis International Conference, Beijing, China, September 2006.
8. University of South Dakota Research Council Travel Grant ($500) and College of Arts and Sciences Supplement Grant ($600), in support of paper presentation at the International Conference on Statistics and Mathematics, Honolulu, Hawaii, June 2004.

**HORNOR**

1. List on Cambridge Who’s Who 2010-2011
2. Nominee of Belbas-Larson Awards for Excellence in Teaching, 2010

**UNIVERSITY COMMITTEE SERVICE**

**Member (at-large), University Student Affairs Committee, 2013-2016**

This committee formulates and recommends policy with concerns centered on whatever affects the well-being of student members of the university community. Normally these concerns focus on matters relating to counseling, residence living, student health, social problems, and the effects of governance relating to student life. Other matters may be deemed of special importance to the committee as the occasion demands or as they come to the committee by referral.

**Member (at-large), University Honorary Degrees Committee, 2010-2013**

Review all nominees and make recommendations to the President of the U.

**Member, University Search Committee for Honors Program Director, 3/17-4/8, 2011**

Review all application materials; attend public presentations given by each applicant; participate in face-to-face interview for each candidate; contribute to final recommendation.

**Member, University General Education Requirements Committee, 2009-2012**

The committee considers modifications, additions, deletions, and other issues related to the general education requirements of the university.

**Member, University Honors Committee, 2008-2011**

The committee reviews and elects the proposals for the Honors semesters. It discusses other issuers with respect to improving the Honors Program of the U.

**Member, University Assessment Committee, 2006-2009**

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| The committee oversees and evaluates the University's assessment activities. It assists academic units in their assessment activities, distributes assessment accomplishments within the university, and promotes academic improvement through assessment. |

**Member, University Graduate Council & Curriculum Committee, 2008 (spring)**

-for Jose Flores who was on sabbatical leave

**The graduate council is the principle legislative body of the graduate school. Its purpose is to consider, enact, and implement policies and rules related to graduate education and research. The graduate curriculum committee reviews and proves** graduate curriculum requests.

**Member, University Retention Committee, 2005**

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| The committee discusses several issues that may affect retention, including: students’ academic preparation; level of academic challenge; students’ connections to peers, faculty, and campus; quality of advising; and, finances. Also, the committee analyzes related data and recognizes the key components in identifying and implementing effective retention strategies. |

**COLLEGE COMMITTEE SERVICE**

**Member, College of Arts & Sciences Research Committee, 2011-2013**

Its basic charge is to consider and advise on internal and external research applications where there is a competitive process, such as helping College decide which proposals to advance in USD Office of Research or NEH competitions. The committee will provide additional faculty input. Other tasks include involvement with travel grants, summer research grants or more broadly, figuring out ways to advance the research mission in the College.

**Chair/Vice Chair, College Science/Mathematics Division Office, 2007-2008/2006-2007**

Organize division activities/Organize division activities in the absence of the Chair.

**Chair/Vice Chair, College of Arts & Sciences Advisory Committee, 2007-2008/2006-2007**

Provide advices to the Dean of the College upon request, such as review applications and make recommendations to the Dean for various College awards.

**Member, College of Arts & Sciences Technology Committee 2005-2006**

Deals with technology matters of the College, such as prioritizing hardware and software, updating as well as distribution of computers among faculty and departments.

**Member, College Math Dept. Chair Search Committee, 2004**

Participate in interviewing two internal candidates, selecting, and recommending to the Dean.

**DEPARTMENT COMMITTEE SERVICE**

**Director, Dept. Graduate Program, 2005-Present**

Provide program and application information for prospective students; evaluate the applications; write MA/MS exams for Plan B students; coordinate with Graduate School in promoting the departmental graduate programs and assist in recruiting; renew the graduate brochure; contributed to the addition of the MS program.

**Chair, Dept. Graduate Program Committee, 2004-Present (Member, 2003)**

Schedule MA/MS final exams and organize committee meetings on the matters of the program.

**Member, Dept. Tenure/Three Year Review Committee 2009-present**

In 2009, we reviewed two tenure and promotion applications and I drafted a recommendation letter for one of the candidates.

**Member, Dept. Assessment Committee, 2005-Present**

Participate in department annual assessment activities and contribute in producing annual assessment reports for MA, MS and undergraduate programs.

**Coordinator, Calculus/Algebra II Writing Committee**

**(Merten M. Hasse High School Mathematical Contest), 2003-2004, 2006-present**

Prepare, produce and edit contest questions in consultation with committee members.

**Member, Dept. Book Selection Committee (calculus), 2012- Present**

Review available books, select and make recommendations to the Chair of the department.

**Member, Dept. Tenure-Track Hiring Committee 2010**

We reviewed number of applications and one position is filled.

**Coordinator for Calculus I, 2004-2007, 2008-2009**

Coordinate multiple sections of the MATH 123 (Calculus I).

**Member, Dept. Tenure-Track Hiring Committee 2009**

We reviewed more than 100 applications and filled one open position.

**Member, Dept. Undergraduate Program Committee, 2004-2007**

Engage in general discussions and routine activities related to the undergraduate program.

**Member, Dept. Appendix G Committee, 2005**

Contribute to the rewriting of the departmental Appendix G document.

**Member, Four Dept. Tenure-Track Hiring Committees, 2004**

Review of prospective faculty applications (about 140) in external searches, participation in the interview process, selection and recommendation of candidates to the Dean; four new tenure-track assistant professors were hired.

**Member, Dept. Instructor Hiring Committee, 2004**

Review of applications, participation in the interview process, selection and recommendation; one new instructor was hired.

**DISSERTATION/THESIS COMMITTEES**

1. PhD Dissertation Committee, Apr. 2013-present

For Shivatharsiny Rasalingam ­– Material Chemistry, USD

1. MS Thesis Committee, Oct. 2012-Apr. 2013

For D'Ann Barker – Physics, USD

1. MA Oral and Written Examination Committee, Apr. 2013

For Justin Mark Peterson – Mathematics, USD

1. Undergraduate Honors Thesis Committee, Dec. 2012-present

For Rezac, Joseph – Mathematics, USD

Rezac, Joseph gave a presentation of his research at 2013 IDEA fest of USD

Advisors: Yuhlong Lio and Nan Jiang

1. PhD Dissertation Committee, 2011-Nov. 26, 2012

For Jason Shepherd ­– Computational Science and Statistics, USD

1. MS Thesis Committee, May- Oct. 25, 2012

For Shivatharsiny Rasalingam – Material Chemistry, USD

1. MS Thesis Committee, May-Nov. 15, 2012

For Nga Nguyen – Chemistry, USD

1. Chair, MA Oral and Written Examination Committee, Nov. 19, 2012

For Graves, Catherine L. – Mathematics, USD

1. MS Thesis Committee (invited), 2011- Nov. 16, 2012

For Manju Maharjan – Engineering Technology & Management, SDSU

1. Chair, MA Oral and Written Examination Committee, 2011-2012

For Raak, Nathaniel, – Mathematics, USD

1. PhD Dissertation Committee, 2010-2011

For Adam Wayne Baldwin ­– Computational Science and Statistics, USD

1. PhD Dissertation Committee, 2010-present

For Abul Khasam Shaifullah ­– Computational Science and Statistics, USD

1. MA Oral and Written Examination Committee, 2010-2011

For Brittany Mehlhaff – Mathematics, USD

1. MS Thesis Committee, 2010-present

For Justin P Jackson – Computer Science, USD

1. MS Thesis Committee, 2009

For Guang Wei Ji – Computer Science, USD

1. Chair, MA Oral and Written Exam Committee, 2009-2010

For Teresa A. Chasing Hawk – Mathematics, USD

1. PhD Dissertation Committee, 2007-present

For Michael Wallinga ­– Computational Science and Statistics, USD

1. MA Oral and Written Examination Committee, 2007

For Daniel Fraser – Mathematics, USD

1. MA Oral and Written Examination Committee, 2007

For Sally Bartelt – Mathematics, USD

1. MA Oral and Written Examination Committee, 2007

For Chia Chien Wu – Mathematics, USD

1. MS Thesis Committee, 2006-2007

For Benjamin Lamprecht – Chemistry, USD

1. MS Thesis Committee, 2003-2004

For Doug Jennewein – Computer Science, USD

**ADVISING**

Advisor for 6-8 graduate students of math department before they finalize their graduate committees, the duty includes advising on course selection, program study, final written exams, as well as provides information for job application and further graduate study, such as PhD programs etc.

**PUBLIC SERVICE**

Mentor for 5 recipients of scholarships of the National Science Foundation (NSF) sponsored CSEMS (Computer Science, Engineering and Mathematics Scholarships) program, 2005-2007.

**TEACHING RESPONSIBILITIES**

**Remark:** F02-F05, USD used Student Instructional Report II (SIR II) for student evaluation.

F02 Math 123 Calculus I 5CR 20 Students SIR II

Math 475/575 Operations Research 3(4)CR 13 Students SIR II

Math 216 Discrete Structures 3CR 12 Students SIR II

S03 Math 123 Calculus I 5CR 16 Students SIR II

Math 216 Discrete Structures 3CR 21 Students SIR II

F03 Math 123 Calculus I 5CR 20 Students SIR II

Math 121 Survey of Calculus 4CR 37 Students SIR II

Math 216 Discrete Structures 3CR 8 Students SIR II

S04 Math 123 Calculus I 5CR 28 Students SIR II

Math 216 Discrete Structures 3CR 10 Students SIR II

F04 Math 123 Calculus I 5CR 20 Students SIR II

Math 471/571 Numerical Analysis 3(4)CR 6 Students SIR II

Math 216 Discrete Structures 3CR 13 Students SIR II

S05 Math 125 Calculus II 5CR 12 Students SIR II

Math 216 Discrete Structures 3CR 18 Students SIR II

F05 Math 416/516 Combinatorics 3(4)CR 10 Students SIR II

Math 731 Partial Differential Equations 3(4)CR 8 Students SIR II

**Remark:** Since S06, USD has used IDEA Diagnostic Form Report for student evaluation.

S06 Math 123 Calculus I 5CR 30 Students Similar, Middle 40%

Math 471/571 Numerical Analysis 3(4)CR11 Students Similar, Middle 40%

F06 Math 125 Calculus II 5CR 21 Students Much higher, Highest 10%

Math 123 Calculus I 5CR 24 Students Higher, Next 20%

S07 Math 125 Calculus II 5CR 22 Students Higher, Next 20%

Math 316 Discrete Mathematics 3 CR 13 Students Higher, Next 20%

F07 Math 125 Calculus II 5CR 22 Students Similar, Middle 40%

Math 731 Partial Differential Equs. 3(4)CR 7 Students Lower, Next 20%

S08 Math 123 Calculus I 5CR 19 Students Higher, Next 20%

Math 471/571 Numerical Analysis Cancelled due to low enrollment

F08 Math 475/575 Operations Research 3(4)CR 5 Students Much higher, Highest 10%

Math 416/516 Combinatorics 3(4)CR 10 Students Higher, Next 20%

S09 Math 123 Calculus I 5CR 23 Students Higher, Next 20%

Math 471/571 Numerical Analysis 3(4)CR 6 Students Higher, Next 20%

F09 Math 123 Sec. 055 Calculus I 5CR 16 Students Much higher, Highest 10%

Math 731 Partial Differential Equs. 3(4)CR 5 Students Higher, Next 20%

Math 123 Sec. 035 Calculus I 5CR 19 Students Similar, Middle 40%

S10 Math 492/592 (topics) Num. Anal. 3(4)CR 6 Students Higher, Next 20%

Math 123 Calculus I 5CR 17 Students Similar Middle 40%

F10 Math 123 Calculus I 5CR 19 Students Higher, Next 20%

Math 412/512 Linear Algebra 3(4)CR 28 Students (Raw) Higher, Next 20%

S11 Math 123 Calculus I 5CR 23 Students Similar, Middle 40%

Math 471/571 Numerical Analysis 3(4)CR 9 Students Similar, Middle 40%

F11 Math 432/532 Partial Diff. Equs. 3(4)CR 8 Students Similar, Middle 40%

Math 731 Partial Differential Equs. 3(4)CR 6 Students Please see remark

**Remark:** IDEA forms for Math 731 were filled by all students of this course and submitted to Dean’s office, but forms were lost in the subsequent process.

S12 Math 421 Complex Analysis 3CR 7 Students Higher, Next 20%

Math 123 Calculus I 5CR 17 Students Similar, Middle 40%

F12 Math 416/516 Combinatorics 3(4)CR 11 Students (Raw), Similar, Middle 40%

Math 125 Calculus II 5CR 30 Students Similar, Middle 40%

S13 Math/Csc 471/571 Numerical Anal. 3(4)CR 13 Students Similar, Middle 40%

Math 123 Calculus I 5CR 20 Students Similar, Middle 40%

F13 Math 125 Calculus II 5CR 21 Students

Math 731 Partial Differential Equs. 3(4)CR 7 Students

Math 432/532 Partial Diff. Equs. 3(4)CR Cancelled due to low enrollment

S14 Math 721 Complex Variables 3(4)CR Scheduled

Math 421/521 Complex Analysis 3(4)CR Scheduled

Math 123 Calculus I 5CR Scheduled

**PROFESSIONAL SOCIETIES**

American Mathematical Society, 2007-2013

Sigma Xi, the Scientific Research Society, 2007-2008

Council of Higher Education, 2006-2008

National Education Association, 2006-2008

South Dakota Education Association, 2006-2008

Pi Mu Epsilon, National Mathematics Honor Society, 2003-present

Mathematical Association of America, 1997-2008, 2012-present