

PERSPECTIVES

UK Department of Mathematics

Summer 2008

Letter from the Chair



Greetings to alumni and friends of the UK Mathematics Department. In July of 2007, I became chair of the department that, despite significant decrease in its faculty size in recent years, continues to sustain strength in research, teaching, and service to the Commonwealth of Kentucky. The Department of Mathematics teaches

an average of 5,000 students per semester at all levels (the largest among all departments), and has one of the most successful doctoral programs at UK. Five current faculty members were holders of the University of Research Professorships; two were awarded the Centennial Fellowships by the American Mathematical Society; and one was named the NSF New Directions Professor at the Institute for Mathematics and its Applications (IMA) in 2006. The department has also been the leader in the College of Arts and Sciences in external funding in the past several years. As chair of the Mathematics Department, I appreciate the opportunity to work with students, faculty, and staff to further strengthen mathematics research and education at UK. I also look forward to getting better acquainted with alumni and friends of the Mathematics Department.

The department continues to excel in graduate education. In 2007-2008, seven graduate students received their doctoral degrees, and fourteen received their Masters' degrees. In addition, seven graduate students completed thesis defense and received their doctoral degrees in the summer of 2008.

I am very pleased to announce that faculty member **Uwe Nagel** was appointed in 2007 as the second Wimberly C. and Betty J. Royster Professor of Mathematics, thanks to a generous gift from Wimberly and Betty Royster. I was deeply honored and extremely grateful to receive the second Ralph E. and Norma L. Edwards Professorship in Mathematics, which was made possible by a generous gift from Mrs. Norma Edwards. As a faculty member I have been very impressed by the strong support of our alumni and friends over the years. Generous gifts of alumni and friends play a very important role in enhancing our teaching and research

programs, through scholarships and fellowships for undergraduate and graduate students in mathematics, endowed lectureships, and named professorships. A complete list of alumni-supported development funds may be found on our department's website

www.math.uky.edu/Alumni/development

I appreciate your continuing support--whether by your contributions, by recommending our undergraduate and graduate programs to potential students, or by your valuable advice. I look forward to hearing from you. Please come to see us whenever you're back in Lexington.

Zhongwei Shen, Chair
chair@ms.uky.edu

New Faculty



Benjamin Braun joined the Department as an assistant professor in August 2007. Ben received his Ph.D. in May 2007 from the Washington University at St. Louis under the supervision of John Shareshian. His research interests lie in the area of discrete mathematics.

He is especially interested in topological, algebraic and geometric methods in combinatorics.

Research Professorships Appointed



Uwe Nagel was appointed in 2007 as the second Wimberly C. and Betty J. Royster Professor of Mathematics. Uwe received his Ph.D. in 1990 from the University of Paderborn, Germany. He joined the department in 2002 as an assistant professor and was promoted to associate professor in 2005. Uwe's research covers a wide range of basic topics in

commutative algebra and algebraic geometry. He is the author or co-author of more than 60 research publications. Uwe was the recipient of the prestigious New Directions Professorship for 2006-2007 by the IMA.

Zhongwei Shen was appointed in 2007 as the second Ralph E. and Norma L. Edwards Professor of Mathematics. A native of China, Shen received his Ph.D. in 1989 from the University of Chicago. He joined the department in 1995 as an assistant professor and was promoted to professor in 2003. Shen's research interests lie at the interface of harmonic analysis and partial differential equations. His recent research has been focused on boundary value problems in domains with rough boundaries.

Faculty News

Faculty Promoted

Alberto Corso was promoted to associate professor as of July 1, 2007. Alberto, who received his Ph.D. in 1995 from Rutgers University, joined the department as an assistant professor in 2000. His primary research interests are in the areas of commutative and computational algebra.

Michel Jabbour was promoted to associate professor as of July 1, 2007. Michel received his Ph.D. from the California Institute of Technology in 1999 and joined the department as an assistant professor in 2001. His research interests lie in the areas of continuum mechanics and mathematics of materials.

Changyou Wang was promoted to full professor as of January 1, 2007. Changyou received his Ph.D. from Rice University in 1996. He joined the department as an assistant professor in 1999 and was promoted to associate professor in 2003. His research interests lie in the area of nonlinear partial differential equations.

Faculty Retirement

In May 2007 the department said thanks to Professor **Tom Hayden**, who retired after 46 years of service at the University of Kentucky. Tom received his B.S. in Physics in 1954 and his Ph.D. in Mathematics in 1961, both from the University of Texas. Tom's research interests have been in the areas of numerical analysis and applied mathematics.

New Research Grants

Benjamin Braun received a three-year grant from the National Science Foundation (NSF) for a project entitled "Algebraic and Topological Combinatorics." The project runs from July 2008 to June 2010.

Alan Demlow received a three-year NSF grant "Adaptive FEM for Controlling Pointwise Errors and Level sets." The project runs from July 2007 to June 2010.

Peter Hislop received a three-year NSF grant for a project entitled "Correlations and Transport for Random Schrödinger Operators." The project runs from July 2008 to June 2011.

Chi-Sing Man received a research grant from the NSF Applied Mathematics Program for a project entitled "Some Studies in the Mathematics and Mechanics of Textured and Prestressed Polycrystalline Materials" (August 2008--July 2011).

Peter Perry received a three-year NSF grant for a project entitled "Geometry and Partial Differential Equations." The project runs from June 2007 to May 2010.

Changyou Wang received a joint US-China research grant, jointly funded by the American and Chinese National Science Foundations. The grant runs from July 2008 to June 2010.

NSF Postdoctoral Fellowship



Katherine Ott, a doctoral graduate of the University of Virginia, will visit the University of Kentucky for three academic years, beginning in the fall of 2008. Dr. Ott is supported by a NSF Postdoctoral Fellowship; her postdoctoral advisor is Professor Russell Brown.

UK Mathematicians at Oberwolfach

The Mathematical Research Center in Oberwolfach in southern Germany (www.mfo.de) is a world-famous center for research in Pure and Applied Mathematics, hosting intensive workshops with participation by invitation only from the organizers. The following University of Kentucky faculty gave invited presentations at Oberwolfach during the past year: **Peter**

Hislop gave presentations in 2007 and 2008, **Peter Perry** was a participant and an invited speaker at the Oberwolfach Workshop on Analysis and Geometric Singularities, August 19-25, 2007. **Changyou Wang** was an invited participant and speaker at the Oberwolfach Workshop on Partial Differential Equations, July 22-28, 2007.

Invited Lectures

In June 2008 **Richard Ehrenborg** and **Margaret Readdy** gave invited talks at the Billerafest, a conference in celebration of Louis Billera's 65th Birthday (one of the co-organizers is UK professor **Carl Lee**). Lou Billera has many connections with Kentucky, among them being a coauthor of Margaret and Richard's, as well as the thesis advisor of Carl Lee.

Zhongwei Shen delivered a one-hour invited address entitled "The Celebrated Calderón-Zygmund Lemma Revisited" at the AMS 2008 Spring Southeastern Meeting, held at Baton Rouge, Louisiana on March 28-30, 2008.

Changyou Wang visited the Department of Mathematics, Université Catholique de Louvain, Belgium during the period May 6-May 31 2008 and delivered a series of lectures on "Analysis of Infinity Harmonic Functions". He was also an invited speaker at the 2007 Workshop/Summer School on "Qualitative Properties of Solutions to Elliptic and Parabolic Equations" on June 7-10, 2007 in Saariselkä, Finland.

Nicholas Loehr (College of William and Mary), Gabor Pataki (University of North Carolina), **Margaret Readdy**, Carla Savage (North Carolina State), and University of Kentucky's Assistant Professor of Statistics Ruriko Yoshida are co-organizing the special session "Combinatorial Enumeration, Optimization, Geometry, and Statistics" at the AMS Fall Southeastern Sectional meeting in Murfreesboro, TN. Carla Savage will be giving a one-hour invited address at the meeting. In the special session graduate student Carlos Nicolas will be giving a talk, along with **Benjamin Braun**, **Margaret Readdy** and Ruriko Yoshida.

Book Editing and Publications

Alberto Corso and his colleagues Juan Migliore and Claudia Polini at University of Notre Dame co-edited the volume *Algebra, Geometry, and their Interactions* in the AMS Series *Contemporary Mathematics* (volume 448, 2007). **Peter Hislop** and colleague François Germinet (*Université de Cergy-Pontoise*, France) co-edited the volume *Adventures in Mathematical Physics* in the AMS series *Contemporary Mathematics* (Volume 447, 2007). **Peter Perry** co-edited the volume *Spectral*

Theory and Mathematical Physics: A Festschrift in Honor of Barry Simon's Sixtieth Birthday (AMS Proceedings of Symposia in Pure Mathematics, 2007), together with colleagues Percy Deift (New York University), Cherie Galvez (Caltech), Fritz Gesztesy (University of Missouri) and Wilhelm Schlag (University of Chicago). **Changyou Wang** published a joint monograph, *The Analysis of Harmonic Maps and their Heat Flows* (World Scientific Publishing, 2007), with Fanghua Lin of the Courant Institute of Mathematical Sciences at New York University.

Visiting Professorships

Peter Hislop was a visiting professor at both the Université de Cergy-Pontoise and Université de Toulon et la Garde, in France in summer 2008. **Chi-Sing Man** held a research appointment at the National Energy Technology Laboratory in Pittsburgh in summer 2008. He gave invited talks at the 14th International Symposium on Plasticity and Its Current Applications (Big Island, Hawaii, January 2008) and at the 15th International Conference on Textures of Materials (ICOTOM 15, Pittsburgh, Pennsylvania, June 2008).

Mathematics Outreach

Continuing with activities related to UK's Appalachian Mathematical Sciences Partnership, University of Kentucky faculty **Paul Eakin** and **Ken Kubota's** text will be used again in Fall 2008. This text, together with the University of Kentucky's internally developed WHS (Web Homework System) reduces the text cost from \$90 to less than \$20 for about 200 students. The same text is used in the *Access to Algebra* program for high school students taking MA 109. Professor **Sathaye** has also authored the open source text *Precalculus with Geometry and Trigonometry*, which was used for Precalculus (MA 110) at UK in Fall 2007 and will be revised and used again in Fall 2008. Other continuing Mathematics Outreach activities include the Kentucky Partnership System, a major software system developed by **Ken Kubota** that supports the Kentucky Early Mathematics Testing Program (a tool that allows high school students to assess their readiness for College level mathematics) and the Kentucky Online Testing (a statewide placement exam system). Interested readers can view the online presentation at <https://www.mathclass.org/WebPages/Pages/174/MaSciSp08.pdf>

or visit www.mathclass.org.

Carl Lee is a member of a team of Kentucky math faculty, math education faculty, and school teachers who are working for the KDE on developing End of Course

Assessments for Algebra I and Geometry. This project is directed by Bill Bush at the University of Louisville.

Acclaim Project

The University of Kentucky is a member of the NSF ACCLAIM Center for Learning and Teaching. In the summer of 2007, UK, together with the University of Tennessee, the University of Louisville, Ohio University, and West Virginia University welcomed the third cohort of 17 doctoral students in Mathematics Education. They arrived on WVU's campus from as far away as Anchorage, Alaska, and Chincoteague, Virginia, for an intensive five week course-taking/bonding by fire experience. They began taking their academic year courses online, starting with a curriculum course offered by Dr. Margaret Mohr in UK's Department of Curriculum and Instruction, and a geometry course offered by **Carl Lee**, both in Fall 2007. These courses were taught using the asynchronous course platform called "Moodle" and the synchronous meeting software called "Adobe Connect." They all returned for the Barrett Lectures at the University of Tennessee in April 2008, and Carl met with them there (and also participated in a panel on *Issues with Beginning Math Majors*). The ACCLAIM students will take at least two more courses through UK, and we are hoping to bring them to UK for their summer 2009 session.

Conferences and Lectures

Conference in Honor of Ted Suffridge

On May 8-10, 2007, a conference on "One and Several Complex Variables" was held at UK to celebrate the 75th birthday of Professor **Ted Suffridge**, who has served with distinction at the University of Kentucky. Invited speakers included Professors Joseph Cima (University of North Carolina), Peter Duren (University of Michigan), Ian Graham (University of Toronto), John Pfaltzgraff (University of North Carolina), and Stefan Ruschweyh (University of Wuerzburg, Germany). Returning alumni included co-organizer **Michael Dorff**, **Chris Leverenz**, **Stacy Muir**, **Jerry Muir**, **John Prather**, **Evelyn Pupplo-Cody**, **Kevin Roper**, and **John Thompson**.

Hayden-Howard Lecture

On April 2, 2008, Professor **Joachim Rosenthal** from the University of Zurich gave the eighth Hayden-Howard Lecture on "Three Challenges of Claude Shannon". Inaugurated in the spring of 2001 by a generous contribution to the UK Department of

Mathematics, the Hayden-Howard Lecture series was established to honor Professors emeritus **Thomas Hayden** and **Henry Howard**.

Van Winter Memorial Lecture in Mathematical Physics.

Professor **Joel L. Lebowitz** from Rutgers University gave the sixth van Winter Memorial Lecture in Mathematical Physics on April 7, 2008. The lecture series honors the memory of Professor **Clasine van Winter**, who held a joint appointment in the Department of Mathematics and Department of Physics and Astronomy.

News from the Staff



In August 2007, the department welcomed back **Jakayla Robbins** as the newly created Mathematics Curriculum Development Director. Jakayla received her Ph.D. in 2003 from the University of Kentucky under the supervision of Professor **Carl Lee**.

In July of 2008, **Chris Vancil** retired after 32 years of service to the Department of Mathematics as an instructor and Departmental Budget Officer, succeeding his mentor **Cliff Swauger** and working with twelve Department Chairs during his tenure as Budget Officer. The Department presented Chris with a gift card from Lowe's which, Chris writes, is "my favorite store". Chris writes: "It's been a great ride! I've really enjoyed my work and being a part of the Math Department for 32 years. I just hope that I'm ready for the next adventure." We are very grateful to Chris for his many years of service, his outstanding teaching, and his conscientious and effective service as caretaker of the Department's fiscal affairs.



Chris is succeeded by **Lyn LeMieux**, who worked with three chairs as Assistant to the Chair and Head of Staff. Lyn brings her extensive experience in the department and its operations to bear on the new position. We wish her well and we are grateful for her continued service.

Graduate Program

New Director of Graduate Studies

In December 2007 Professor **Serge Ochanine** stepped down as Director of Graduate Studies, a position he held since 2004. Many thanks to Serge who served the department very well these past several years. Professor Ochanine is replaced by Professor **Qiang Ye**.

Fourteen Doctoral Degrees Awarded

During 2007-2008, seven students received Ph.D.'s in Mathematics from UK. The student's name is followed by the advisor's name and the area of research.

Shawn Clift (Edgar Enochs, Algebra), **Scott Godefroy** (Chi-Sing Man, Mathematics of Materials), **Daniel Kiteck** (Edgar Enochs, Algebra), **Sonja Petrovic** (Uwe Nagel, Algebra), **Aekyoung Shin-Kim** (Zhongwei Shen, Partial Differential Equations), **Michael Slone** (Richard Ehrenborg, Discrete Mathematics), and **Wei Zhang** (Rencang Li, Numerical Analysis).

The following students received their Ph.D. in Mathematics from UK in the summer of 2008: **Rachelle Bouchat** (Uwe Nagel, Algebra), **Philip Busse** (Uwe Nagel, Algebra), **Gene Butcher** (Edgar Enochs, Algebra), **Christopher Frayer** (Peter Perry, Differential Equations), **Teng Jiang** (Changyou Wang, Partial Differential Equations), **Carlos Nicolas** (Carl Lee, Discrete Mathematics), **Erik Stokes** (Uwe Nagel, Algebra).

Masters Degrees Awarded

The following students received Masters' degrees in 2007-2008: **Arundhati Bagchi Misra**, **Alan Boucher**, **Megan Dailey**, **Mark Gorgan**, **Adam Keach**, **Ji Yoon Jung**, **Yuan Li**, **Scott McClintock**, **Sunil Nanwani**, **Zhongyi Nie**, **Jesse Pratt**, **Laura Steil**, **Justin Taylor**, and **Sebastian Torrealba**.

Honors and Awards

Julia Chifman received the Kentucky Opportunity Fellowship for 2008-2009. Each year, one graduate student from the mathematics program is awarded the Kentucky Opportunity Fellowship by the Graduate School, as a result of our program having been identified as a program that has achieved national distinction or is well-positioned to gain such recognition. Julia is a



doctoral student of Professor **James Beidleman**. In 2007-2008 the fellowship was awarded to **Joel Kilty**, a doctoral student of Professor **Zhongwei Shen**.

The University of Kentucky received a \$1.7 million dollar gift from the estate of Max Steckler to create the **Max Steckler Fellowship** fund for graduate students. Thanks to the generous gift, six Mathematics graduate students received Steckler fellowships this year. The recipients for 2008-2009 are **Aleams Barra**, **Eric Kahn**, **Joel Kilty**, **Zhongyi Nie**, **Ping Zhang**, and **Weifeng Zhi**. In 2007-2008, **Erik Kahn**, **Carlos Nichols**, **Zhongyi Nie**, and **Ping Zhang** received the Max Steckler Fellowships.

Rachelle Bouchat, **Eric Kahn**, and **Julie Miker** received the 2008 College of Arts and Sciences Outstanding Teaching Assistant Awards, recognizing excellence in undergraduate instruction. Congratulations!

Enochs Scholarship. **Deb Dibyajyoti** received the 2008 Enochs Scholarship, established in honor of Professor Edgar Enochs by many friends and doctoral graduates of Professor Enochs. It is awarded each year to an outstanding doctoral student in the field of Algebra. Deb is a doctoral student of Professor **David Leep**. The 2007 Enochs Scholarship was awarded to **Julia Chifman**.

Royster TA Award. **Joel Kilty** and **Josh Roberts** received the 2008 Wimberly C. Royster Outstanding Teaching Assistant Awards, established in honor of Dr. **Wimberly Royster**, former department chair, Dean of the College of Arts and Sciences, Vice-President for Research, and longtime friend and supporter of the Department of Mathematics. The 2007 Royster TA awards were given to **Chris Frayer** and **Tricia Muldoon**.

The following students received the 2008 summer research awards to support their doctoral research: **Gene Butcher**, **Julia Chifman**, **David Cook**, **Phuoc Ho**, **Ji Yoon Jung**, **Eric Kahn**, **Joel Kilty**, **Julie Miker**, **Zhongyi Ni**, **Justin Taylor**, and **Ping Zhang**.

The Algebra Cubed grant is a \$1.8 million three-year NSF grant that Richard Millman received to support the improvement of mathematics instruction in the middle and high schools of Bath and Powell Counties in Kentucky. The grant provides fellowships for Algebra Cubed Fellows to work with teacher mentors in the schools to improve the teaching of mathematics at the middle and high school level. Graduate students **Matt Banander**, **Casey Gregory**, **Chris Mattingly**, **Thomas Merrick**, **Julie Miker**, and **Daniel Wells** received the

Algebra Cubed Fellowships for 2008-2009. Because of Professor **Richard Millman**'s move to Georgia Tech this year, Professor **David Leep** has taken over the administration of the third year of the Algebra Cubed grant.

Publications by Graduate Students

Joel Kilty's paper "The L^p Dirichlet problem for the Stokes system on Lipschitz domains" has been accepted for publication in the *Indiana University Mathematics Journal*. **Erik Stokes**'s paper "The arithmetic degree of squarefree strongly stable ideals" will appear in *Communications in Algebra*. **Sonja Petrovic**'s paper "Universal Groebner bases of varieties of minimal degree" will appear in *Mathematical Research Letters*.

Undergraduate Program

New Director of Undergraduate Studies

In June 2007 Professor **Avinash Sathaye** stepped down as Director of Undergraduate Studies, a position he had held since 2003. We were very grateful to Professor Sathaye for his service and pleased that Professor **Russell Brown** agreed to assume the position. Professor Brown joined the department in 1990 and served the Department as Director of Graduate Studies from May 2002 to July 2004.

Bachelor's Degrees Awarded

The following students received Bachelor's degrees in Mathematics in August and December 2007: **Jerrod Felice, Kayla Gifford, Bradley Glass, and Chrystina Smith**. The following students received Bachelor's degrees in Mathematics in May 2008: **David Crabb, Rachel Dunnagan, Andrew Gombos, James Hall, Max Hellgrath, Patrick Kern, Raymond Kremer, Joshua Myers, Joshua Odoi, Michael Pizzuti, Corey Price, Steven Reeve, Amanda Thaxton, and Katherine Thompson**.

The following students received Bachelor's degrees in Mathematical Economics in August and December 2007: **Nicole Gale, Iouri Kouriantnikov, Roland Lee, and Todd Wilkinson**. The following students received Bachelor's degrees in Mathematical Economics in May 2008: **Craig Campbell, Sarah Condley, Shannon Hincker, Ashley Schwartz, and Kevin Siders**.

Carolyn S. Bunyan Scholarship

The **Carolyn S. Bunyan Scholarship** was established by Carolyn Soward Bunyan in 1992 in memory of C.G. Soward, one of her two brothers, and in honor of her older brother, William C. Soward, her sister Mary A. Soward, and her two nieces, Ann Soward Vance and Erwinna Soward Wright. This year's Carolyn S. Bunyan Scholarships were awarded to **Steven Taylor** and **Daniel Vollmer**. In 2007 the scholarships were awarded to **Steven Reeves** and **Katherine Thompson**.

J.C. Eaves Scholarship

The **J. C. Eaves Endowed Scholarship in Mathematics** was established in December 2004 by James C. Eaves, Jr. and Mary G. Eaves in memory of Prof. J. C. Eaves, former Head of the Department of Mathematics and Astronomy (1952-1963) and Professor in our department until 1967. The scholarship is intended for students who are graduates of any high school in the Commonwealth of Kentucky (with preference for otherwise qualified students from Muhlenberg, Taylor or Adair counties), who are Junior or Senior level Arts and Science students majoring in Mathematics and have at least a 3.0 GPA. In 2007 the J.C. Eaves scholarships were awarded to **Rachel Dunnagan, Kayla Gifford, James Hall, Raymond Kremer** and **Meagan Macke**. This year the scholarships were given to **Brian Hart, Heather Hunt, Amy Irvine, and Steven Sturgeon**. We were very pleased to welcome **James Eaves** (B.S. in Mathematics, UK, 1968; J.D., University of Louisville) and **Mary Eaves** (B.A. in Political Science, UK, 1972; J.D., Washington University) at the Department's Awards Day Ceremony on April 25, 2008 and we appreciate their support (see photo below, left to right: Mary Eaves, James Eaves, Steven Sturgeon, Brian Hart, Heather Hunt, Zhongwei Shen).



Robert B. Royster Memorial Award

The **Robert B. Royster Memorial Award** is given each year to a graduating mathematics senior who is pursuing a career in teaching. The 2008 Royster Memorial Award goes to **Steven Reeves**. In 2007 **Christy Williams** received the award.

Sallie E. Pence Award

The **Sallie E. Pence Award** was established in 1963 by Dr. J. C. Eaves, the Mathematics Department Chair at the time. The award honors Dr. Sallie E. Pence, a Professor of Mathematics in the Department. Her interest was in the training of mathematics teachers. The funds for the award come from money raised through the sale of a booklet called "Honors Review Problems" by Drs. Eaves and Pence. This year the Sallie E. Pence Awards were given to **Whitney Berberich, Rachel Dunnagan, Phyllis Everhart, Kayla Gifford, Joanna Howerton, Ashley Larsen, Paula Little, Terence Mueller, Steven Reeves, Michael Simms, Ashley Temple, Olivia Winkle, and Charity Young.**

Special Lecture

David Bressoud, DeWitt Wallace Professor of Mathematics at Macalester College and President-elect of the Mathematical Association of America (MAA), gave an undergraduate colloquium on "Srinivasa Ramanujan: A Self-Taught Genius" in March 2008. Srinivasa Ramanujan (1887–1920) was a brilliant mathematician from southern India who taught himself most of the mathematics he knew. In his lecture, Professor Bressoud described Ramanujan's tragically short life, his collaboration with G. H. Hardy, and the rediscovery of his "Lost Notebook" in 1976. His lecture was presented as a part of MA 330, *History of Mathematics* and was attended by a number of undergraduate students.

MathExcel Program

In July 2007 Professor **Peter Perry** became the director of the **MathExcel Program**, a special program for first-year Calculus students. The program garnered the largest enrollment in many years for Fall 2008. Nearly 90 students will participate in this program in Fall 2008. MathExcel students attend six hours per week of problem-solving workshops to hone calculus skills and learn group study and problem-solving; each workshop of approximately 30 students is led by a graduate student workshop leader and two undergraduate assistants. You can read more about the MathExcel program at www.mathexcel.org.

Upcoming Events

Van Winter Lecture in Mathematical Physics. Professor **Percy Deift** from the Courant Institute at the New York University will give the eighth Van Winter Memorial Lecture on December 4, 2008 at 4:00 PM, in

room 155 of the Chemistry-Physics Building on campus. He will speak on "Universality for Mathematical and Physical Systems".

The 5th *Graduate Student Combinatorics Conference* (GSCC 2009) comes to the University of Kentucky! Graduate students **Eric Clark, Patricia Muldoon** (Chair), **Ji Yoon Jung** and **DJ Wells** are organizing the GSCC 2009. **Margaret Readdy** is the faculty advisor. It will be held on March 27-29, 2009. The confirmed keynote speaker is Richard Stanley (MIT). More information about the conference can be found at <http://www.ms.uky.edu/~gsc>.

Hayden-Howard Lecture. Professor **Carlos Kenig** from the University of Chicago will deliver the ninth Hayden-Howard Lecture in Mathematics on April 16, 2009. Please watch the Mathematics Department website for further details.

Alumni Dinner. We plan to hold an Alumni Dinner during this year's AMS/MAA joint meetings which will take place in Washington, D.C. on January 5-8, 2009. Please contact Russell Brown (rbrown@ms.uky.edu) if you would like to attend.

In the spring of 2010, the University of Kentucky will host two regional mathematics meetings. The **Kentucky Section** of the **Mathematical Association of America (MAA)** will hold its annual meeting on the 26th and 27th of March 2010 and the **American Mathematics Society (AMS)** will hold the **2010 Spring Southeastern Sectional meeting** on the 27th and 28th of March, 2010. By holding these meetings in the same location, we hope to help strengthen ties between the Kentucky mathematics community and mathematicians from outside the state.

News from Alumni

Please send alumni news for this section to Zhongwei Shen, Department of Mathematics, University of Kentucky, Lexington, KY 40506-0027 or to chair@ms.uky.edu

Gene Butcher (Ph.D. 2008) will assume a visiting position at Eastern Carolina University.

Rachelle Bouchat (Ph.D. 2008) will assume a tenure-track assistant professorship at the Slippery Rock University.

Shawn Clift (Ph.D. 2008) will assume a visiting assistant professorship at Centre College, starting August 2008.

Christopher Frayer (Ph.D. 2008) will assume a tenure-track assistant professorship at University of Wisconsin, Platteville.

Scott Godefroy (Ph.D. 2008) has assumed a position with the National Security Agency.

Wei Hu (Ph.D. 1997) was promoted to full professor at Houghton College in western New York State.

Overtoun Jenda (Ph.D. 1981) received the Auburn University College of Agriculture's Humanitarian Award (2008) and the Algernon Sydney Sullivan National Award 2008 (awarded for "excellence in character, service to humanity, scholarship and other activities").

Teng Jiang (Ph. D. 2008) has assumed a position with Cummins Inc. in Columbus, Indiana.

Daniel Kiteck (Ph. D. 2008) will assume a tenure-track assistant professorship at the Indiana Wesleyan University, starting August 2008.

Carlos Nicolas (Ph. D. 2008) will assume a tenure-track assistant professorship at the University of North Carolina at Greensboro, starting August 2008.

Sonja Petrovic (Ph. D. 2008) will assume a research assistant professorship at the University of Illinois-Chicago, starting August 2008.

Michael Slone (Ph. D. 2008) has assumed a position with the University of Kentucky Libraries.

Erik Stokes (Ph. D. 2008) will assume a visiting assistant professorship at Michigan Technological University.

Wei Zhang (Ph. D. 2007) has assumed a position in Solvers and Design Validation Group, SIEMENS in Los Angeles, California.

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