

PRIME BITS

Department of Mathematics Newsletter
University of Colorado, Boulder, CO 80309-0395
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Fall 2009

Volume 11, Number 1

Meet our new faculty



Janos Englander joined the CU Boulder faculty in fall 2009 as an Associate Professor. At the request of Prime Bits he submitted the following biographical sketch.

“I was raised in Budapest and as a child I always imagined that I would become a scientist. So I am happy I became one finally (if you believe a mathematician is a scientist), although I was also convinced

that a scientist should smoke a pipe, which I actually don't do now. I chose a high school that was far away from the place we lived but had a special math program. The other program compensated the downside that we only had four girls in the program; the one with emphasis on Italian had only four or five boys. After high school I got my diploma at Eotvos University, and shortly after that got married and had our first child. My wife is an artist: painter, illustrator and print maker.

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Bart Kastermans joined the Mathematics Department faculty in fall 2009 as an Assistant Professor. At the request of Prime Bits he submitted the following biographical sketch.

“I was born and raised in a small city called Heemskerk in the Netherlands. This is near the sea, maybe a 30 min drive from Amsterdam. While

growing up I always did decently in school, but my focus usually was elsewhere. The elsewhere changed over time passing through skateboarding, triathlon, computers, and mountaineering. The triathlon was a longstanding passion, that ended shortly after I ended third in the national run-bike-run competition. The competition and training around it was enough to get me a serious knee injury that kept me out of the running for at least two years. When it came time to decide what to do after high school, my longstanding interest to go

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First Burnett Meyer Instructorship held by Graeme Wilkin



Graeme Wilkin, the first Burnett Meyer Instructor, began his appointment in fall 2009. This instructorship is funded by a bequest of more than \$2,000,000 from the estate of the late Professor Emeritus Burnett C. Meyer, a member of the CU Boulder faculty from 1957 to 1990. The following biographical notes were submitted for Prime Bits by Dr. Wilkin.

“I grew up in a small town called Burnie in northern Tasmania and later spent time in Melbourne, first at boarding school and then at the University of Melbourne to study mathematics and electrical engineering. After graduating I spent a year working as an Information Technology consultant for Shell Australia, and it wasn't long before I realized that I would much rather spend my time thinking about interesting math problems! I came to the United States for graduate school at Brown University in 2001. After receiving my PhD in 2006 I moved to Baltimore for three years to take a position as a J.J. Sylvester Assistant Professor at Johns Hopkins, and now I am excited to be here in Boulder for the next two years.

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Englander, (continued from p. 1)

We then moved to Haifa, where we spent seven years. I received my MSc and Dsc under the guidance of Ross Pinsky at the Technion, and also our second and third children were born.

“Then my/our postdoctoral wandering began – first a year in Berlin, then three years in Eindhoven, more precisely in a small village called Breugel near Eindhoven, named after the great painter (the older one). It was a very picturesque place: the next street was the field with the cows. Then we spent another seven years at the beach, although this time at the Pacific and not the Mediterranean. I got my first regular appointment in Santa Barbara. Finally, we exchanged the ocean for the mountains, and moved to the Rockies, after a very interesting road trip through Nevada, Arizona and Utah. I work in Probability Theory. More precisely, I am mostly interested in stochastic processes with a motion component and usually also with a branching component. The stochastic process can be considered either in a deterministic or a random environment. In random environments the main issues are certain Large Deviations problems. My work is also closely related to nonlinear partial differential equations -- both elliptic and parabolic.

“Here we (that is my wife, our kids, our dog, our parrot, and myself) are enjoying the beautiful setting, great hikes and the very friendly people of CU. My oldest daughter, who is a voice major, attends CU Boulder too, and tries to avoid the situation when she shows up with dad on campus, because it is really not ‘cool.’ “ Janos.Englander@colorado.edu

Kastermans, (continued from p. 1)

into the army suddenly seemed silly to me and I needed another choice. I kind of liked mathematics and the guy who was teaching it at my school, so this was a "natural" choice. One that now can be said to have been quite beneficial for me. I went to VU University Amsterdam for my undergraduate work. There under the influence of a course by Jan van Mill on point-set topology I became interested in Logic and Set Theory. Since the university I was at does not teach a lot of mathematical logic, I was fortunate that they were flexible in allowing me to take courses elsewhere. I took several courses at the University of Amsterdam, a whole year of logic at the universities in Utrecht and Nijmegen, and finally worked on my masters thesis with KP Hart at the university in Delft. During this time I became very serious about mathematics, and my interest in logic deepened. It also became clear that I couldn't continue with my interests and stay in the Netherlands. Therefore I decided to go to the University of Michigan, Ann Arbor, to work with Andreas Blass on Set Theory. It was interesting to move out of my parental house directly to a different continent. There was a wonderful group of graduate students in Ann Arbor, making that this move worked out quite well.

In some contrast to my life in the Netherlands, being in Ann Arbor was a tremendously social time. Much time was spend hanging out with many of the other graduate students and playing pool (which at the time I became decent at, but unfortunately have mostly lost). At the University of Michigan I had my first teaching experience as well. Coming from a Dutch university the teaching in the US took some getting used to. But over time I have learned to appreciate many things in the US system (though not all).

“During my stay in Ann Arbor I started working with a visiting professor, Yi Zhang. Aside from the mathematics that resulted, it also caused me to visit him in Kazan, Russia for two months and Guangzhou, China for a year. In China I had some teaching duties as well, which was again an interesting change from my earlier experiences. My students were Masters and PhD students, and sometimes it took some doing to get them to interact (which I really needed, because obviously I was less familiar with their backgrounds). One of the things that struck me as interesting was that my classrooms came with ashtrays. Even though I was a rather heavy smoker at the time, I couldn't quite enjoy them. I had been too influenced by western views, it seemed inappropriate to smoke while teaching. After finishing my thesis supervised by both Andreas and Yi, I went to the University of Wisconsin for a postdoctoral position. My work there took an interesting turn, in that a general interest that had led me to learn some computability theory while in Ann Arbor, grew into some serious research. I worked there mostly with Steffen Lempp on several projects in that area. In Wisconsin I also had the opportunity to teach a wide variety of classes. I was assigned a logic graduate course every semester (and only one of those folded), but I also did many different types of undergraduate classes from college algebra, through a large (260 students) lecture of calculus (this made me feel almost more like a performer than a teacher), up to several introduction to proofs classes. During my time in Wisconsin I quit smoking, and returned to my earlier interests in hiking, biking and running. I hope here, as I have already been doing, to expand this to include many mountain activities.

“Experiencing all these different students in different classes has been very interesting. I am eager to experience the Boulder student population, and hope to teach many of them in the ways of mathematicians, along with interacting with many people in and out of the department.”

Bart.Kastermans@colorado.edu

PRIME BITS

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Editor: William B. Jones
william.jones@colorado.edu

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Faculty Highlights

The Mathematics Department has a broad range of research interests including Algebraic and Differential Geometry, Combinatorics, Logic and Foundations, Mathematical Physics, Number Theory, Noncommutative Geometry, Operator Algebras, Probability, and Topology. We presently have twenty-seven tenured and tenure-track faculty as well as four postdoctoral fellows and visitors. The department has more than fifty graduate students and serves close to three hundred undergraduate majors and minors and teaches mathematics for several thousand students in other departments at CU. Some of our faculty are highlighted below.

Jeanne Clelland received a grant from NSF during the years 2009-2011 for support of research on "Topics in the Geometry of Differential Equations."

Richard Green has been awarded a grant from the NSF Topology Program for the project "Polytopal Subcomplexes and Homology Representations". He has been collaborating with a group of physicists in Europe who are applying ideas from combinatorics to quantum information theory and to the physics of black holes.

Karl Gustafson gave invited addresses at conferences in Sweden and Slovakia in June 2009. He has published 15 books and more than 270 papers on mathematics and applied mathematics and has directed 20 Ph.D. dissertations.

Su-ion Ih successfully completed his comprehensive review (reappointment).

Brian Rider successfully completed his review for tenure and promotion to Associate Professor. He became our new Associate Chair for Undergraduate Studies, in Fall 2008.

Eric Stade (Department Chair) is one of six members of the Project Management Team for iSTEM: Integrating Stem Education Colorado. (STEM = Science, Technology, Engineering and Mathematics) This NSF-and-CU funded program is working towards the development of an Institute for STEM education here, and in so doing, seeks to establish the University of Colorado at Boulder as a national center for: Education in STEM disciplines; Research on STEM education; and STEM teacher preparation. iSTEM put on the Inaugural CU Integrating STEM Symposium on August 31. Stade's Outreach Program is in its fourth year. This fall he

received a competitive multi-year grant from the CU Outreach Committee to continue this work. This program fosters partnerships between CU and Boulder Valley Elementary schools to enhance educational experiences in math for students at these schools. The outreach program entails such things as: math clubs, programs for Talented and Gifted students, individual tutoring and mentoring, helping coordinate Family Math Nights at these schools; developing math curricular materials. This year, for example, CU students will work with BVSD faculty to develop projects involving the mathematics of solar energy. Stade visited Tokyo (Sept. 3-18) to (1) work on a joint research project with my co-author Taku Ishii of Seikei University (a private university in Tokyo), and (2) attend the 60th Birthday conference in honor of Takayuki Oda of the University of Tokyo. On September 24 he spoke at the Discovery Learning Luncheon at the University of Texas at Austin on the topic: "Preparing Future K12 Math and Science (or whatever) Teachers: the Colorado Learning Assistant Model (among other things)." Eric and his wife Beth gave a CU wizards presentation "Fibonacci and Phi why can't we all just get along?" Beth (M.A. Math 1995) taught Calculus in the Farrand Hall RAP this past spring. This past winter their son Jack learned to ski, and son Nick took up soccer.

Nat Thiem received a three-year grant from NSF for the support of his research on FRG: Collaborative Research: Characters, liftings and types: Investigations in p-adic representation theory.

Rob Tubbs received a LEAP Associate Professor Individual Growth Grant, to support his research in the history and philosophy of mathematics.

Lynne Walling has resigned from CU Boulder and accepted a permanent position at the University of Bristol (UK). Professor Walling joined the CU Boulder faculty in 1990, after holding positions at St. Olav College from 1987 to 1989 and at Bates College from 1989 to 1990. She served as the Department Chair from fall 2004 until December 2006. We wish her well in this new chapter of her career.

The 2009 Great Plains Operator Theory Seminar organized by **Markus Pflaum, Judy Packer, Carla Farsi, Sasha Gorokhovskiy, and Marty Walter**, was hosted by the CU Boulder Mathematics Department in the summer of 2009.

Graduate Student Awards

2009 Burton W. Jones Teaching Excellence Award

Erika Wittenborn and Ben Katz-Moses

2009 William E. Briggs Teaching Excellence Award

Matthew Jones

2009 W. J. Thron Mathematics Fellowship

Matthew Stackpole

Gates Fellowship

Brian Romero

2009 Frances C. Stribic University Scholarships

David Keyes, Erika Wittenborn, Patrick Newberry, Michael Noyes, Joshua Sanders, Joshua Wiscons, Jonathan Kish, and Camilo Mesa

2009 Chancellor’s Fellowship

Scott Andrews



From left: Chancellor DiStefano, William Stanton, Scott Andrews, Graduate School Dean Stevenson and Professor David Grant (Chair of Mathematics Department Graduate Program) at the Chancellor’s Fellowship Award Ceremony held Sept. 30, 2009. Stanton received the two-year award in 2008.

Chancellor’s Graduate Awards for Excellence in STEM Education.*

Louisa Harris and Ryan Grover

*STEM = Science, Technology, Engineering, and Mathematics



Erika Wittenborn



Ben Katz-Moses



Matthew Jones



Matthew Stackpole



David Keyes



Patrick Newberry



Michael Noyes



Joshua Sanders



Joshua Wiscons

Undergraduate Student Awards

Adele V. Leonhardy Scholarship

William Craig Hoeltgen and Kaylee Richlie

2009 William Lowell Putnam Competition

First: Marshall Carpenter

Second: Andrew Scacco

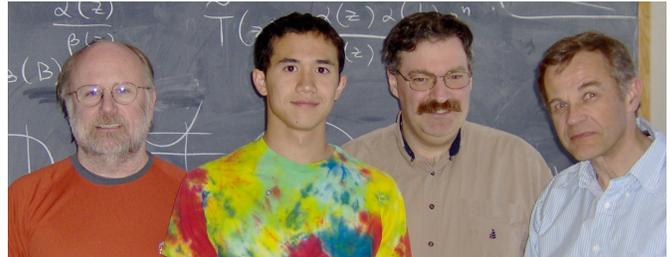
Third: Fadi Elkhatab

All three students received prizes from the Math Department. Carpenter placed first in the state of Colorado, Scacco placed second in Colorado, and both received additional awards from Colorado Governor Bill Ritter.

Problem of the Month Winners for AY 2008-09

Guy Besson (twice), Matthew Herzl (twice), and Stephen David Lewis.

Faculty Advisors for the Putnam Competition and Problem of the Month were: Professors A. Gorokhovskiy, K. Kearnes and S. Kuznetsov.



Pictured from left: Professor K. Kearnes, Marshall Carpenter, Professor A. Gorokhovskiy and Professor S. Kuznetsov.



Pictured, from left: Professor S. Kuznetsov, Professor A. Gorokhovskiy, Fadi Elkhatab, and Professor K. Kearnes.

Retired Faculty News Briefs

Gordon Brown attended the 50th reunion of his class of 1958 at California Institute of Technology in May 2008. He continues to live in Pullman, Washington. Gordon.Brown@Colorado.edu

John H. Hodges and wife Jean have moved to 4475 Laguna Place #207, Boulder, CO 80303. Jean has recently written and produced a play representing the first 150 years of the First Methodist Church (and Boulder) 1859-2009. The first performances were given on October 24, 2009, 7:00 P.M. and October 25, 2009, 3:00 P.M. They are currently in the process of establishing a John H. Hodges Undergraduate Mathematics Scholarship at the University of Colorado, Boulder.

William B. Jones had his book, Continued Fractions: Analytic Theory and Applications, which was written jointly with the late Professor Emeritus W. J. Thron, reprinted by Cambridge University Press in 2008.

Ruth Rebekka Struik is now enjoying life at Frasier Meadows Retirement Center (FMRC) at 350 Ponca Place, Boulder, CO 80303. She continues to be active in the League of Women Voters of Boulder County, Colorado Social Legislation committee, Unitarian-Universal Church of Boulder, Boulder Area Labor Council and the AFL-CIO. Her

three daughters are Marion who lives with son Shafer in New Orleans, Margo who lives with husband Lynn in San Francisco and daughter Kenny a student at Oberlin College, and Louise (loo Ease).

Wilkin, (continued from p. 1)

“My research is in Geometry and Topology, I study moduli spaces of Higgs bundles and Nakajima quiver varieties, these spaces arise from studying special cases of the Yang-Mills equations. My main project (together with my collaborators) is to develop an equivariant Morse theory for singular spaces that will allow us to compute cohomological invariants of these moduli spaces. This touches on many areas of mathematics, there seem to be quite a number of faculty here with interests that overlap mine and I look forward to talking with many people while I am here! Outside the math department my hobbies include rock-climbing, cycling, skiing and running – Boulder seems to be the perfect place for many of these activities! I’m looking forward to the time that I will spend here and please feel free to drop by my office (223) and chat sometime.”

Graeme.Wilkin@colorado.edu

Graduate Degrees

Graduates are listed by name, degree (faculty advisor), thesis title for Ph.D.

December 2008

Daniel McCarl, BA/MA (J. Donald Monk)
Rori Pegnetter, MA (Jem Corcoran)
William Shanahan, BA/MA (Judith Packer)

May 2009

Ryan Grover, MA (Eric Stade)
Louisa Harris, MA (Judith Packer)
Rachel Krieger, MA (Nathaniel Thiem)
Zachary McGregor-Dorsey, MA (Richard Green)
Sooran Kang, PhD (Judith Packer); The Yang-Mills functional and Laplace's equation on quantum Heisenberg manifolds
Iliia Mishev, PhD (Eric Stade); Coxeter group actions on supplementary pairs of Saalschutzyan $4F_3(1)$ hypergeometric series

August 2009

Hugh Denoncourt, PhD (Richard Green); Some combinatorial models for reduced expressions in Coxeter groups



Dr. Sooran Kang & Prof. Packer



Dr. Iliia Mishev & Eunyea Kim



Dr. Hugh Denoncourt

Staying in Touch: News from Alums



jdandrea@westminstercollege.edu

Jonas D'Andrea (Ph.D. Math. August 2008) was named a Project NExT Fellow. This competitive professional development program is sponsored by the Mathematics Association of America and is a high honor for one of our recent CU Boulder graduates. He is in Westminster College in Utah.

James Asbury (B.A. Math. 2000) is employed as a Product Developer at ICAT in Boulder, CO. James' home is in Thornton, CO. jasbury@rocketmail.com

Susan Diesel (B.A. Math. 1985) received an M.S. in 1989 and a Ph.D. in 1992 from Northwestern University and now is a volunteer worker tutoring mathematics at local schools in Norich, Vermont. She writes: "I remember fondly Professor Monk (who gave me a job) and Professor Laver (who taught me analysis). I was in Boulder in summer 2007 for a reunion and rented a bicycle. I wish I had been into cycling when I was an undergraduate! I had a fabulous time seeing the city in a new way." diesel@member.ams.org

Dana Ernst (Ph.D. Math. 2008), an Assistant Professor at Plymouth State University in Plymouth, NH, was recently given the Plymouth State University Distinguished

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Staff News



Donna Maes, Office Manager, pictured above with the Ulam Visiting Professor Pedro Berrizbeita from the Simon Bolivar University in Caracas, Venezuela. In addition to keeping the office running smoothly since October 2004, Donna has won Energy Star Awards by making the department the most energy efficient on the Boulder Campus.



Barbara Wojcik became the Graduate Program Assistant in February 2008. After a year in this job, Barbara was invited by Prime Bits to give impressions about her new assignment.

“I feel so blessed in having a job I totally love. I am learning something new all the time. We have 14 new students joining the graduate program this fall. We also had another student receive the Chancellor’s Fellowship this year and that makes two in a row. This is a very prestigious award. The Graduate Program Chair, Dr. David Grant and recipient, Scott Andrews, were honored at a reception by the Chancellor on September 30th in the Koenig Alumni Center. I was also invited to attend. Dr. Grant and I have submitted an advertisement to the American Mathematical Society for publication again this year. The Student Information System is being phased out with Campus Solutions replacing it in the upcoming months with training forthcoming. Back to school for me but I don’t think you should ever stop learning. I also feel blessed in that my husband, who has been out of work for almost a year, has found a job. He has been hired as nightshift supervisor for the Dish Network warehouse. With the economy the way it is we were concerned but our prayers have been answered. This

year I have a new grand baby #3. Preston Dale Renner was born on May 21st and he is such a happy baby. Grand baby #4 is expected the first week of October. My youngest son Alex will be 18 next month and graduating from Stanley Lake High School next spring. He is currently attending Warren Tech and pursuing a degree in TV/Video Production.”

Professor Ieke Moerdijk presents DeLong Lectures

The Forty-Sixth Annual DeLong Lectures (October 5, 7, 9, 2009) were given by Professor Ieke Moerdijk of the University of Utrecht; his topic: "Logic, Lie Theory and Operads". Professor Moerdijk was awarded the Huygens Fellowship from NWO in 1986 and a PIONEER grant from NWO in 1995. In 2006 he was elected member in the Royal Academy of Arts and Sciences (KNAW).



Ieke Moerdijk

News from Alums, (continued from p. 6)

Mathematics Professor award. Dana wrote: “Not sure how that happened, but I’m not complaining.” Those of us at CU who know Dana understand why he deserved the award. Congratulations Dana! dcernst@plymouth.edu

Jean Gillett Ferris (B.A. Math. 1941) Please see *In Memoriam* on page 9.

Megan L. Fox (B.A. Math. 2007) is employed as a Games (Graphic) Programmer at Netdevil. She writes: “Karl Gustafson, Don Einson and Tobin von der Noell are the three professors that really set me on my path as a mathematician and author.” Her home is in Broomfield, CO. shalinor@gmail.com

Bernard Gillett (M.A. Math.1992) teaches mathematics in the Farrand Hall RAP and in Baker Hall RAP at CU Boulder. He is currently writing a calculus text with William L. Briggs (B.A. Math. 1971), professor of mathematics at CU-Denver, and Lyle Cochran (Whitworth University). gillett@spot.colorado.edu

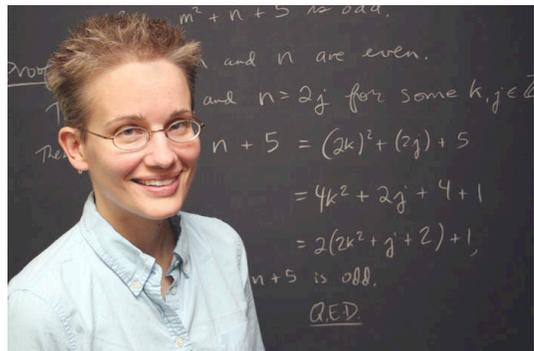
David A. Field (Ph.D. Math. 1971) After 30 years at General Motors Research Laboratories, David Field retired in November 2008. At GM he received several corporate awards, held two patents and published over 50 journal articles. He was active in SIAM, serving on several committees, as Co-President of the Great Lakes Section and organizing several SIAM conferences in Computer Aided Geometric Design. He led the founding of the SIAM Great Lakes Section, for many years the most industrially oriented and active SIAM Section, and he had a leading role in establishing the biennial SIAM conference on Mathematics for Industry. In February 2009 he taught a graduate course on mathematics of Computer Aided Design in the mathematics department at the University of Science and Technology at Hefei, China, a key university established by the Chinese Academy of Science. At the end of July 2009 he became a Fulbright Scholar in the computer science department at the University of Chile in Santiago. In September he delivered the opening plenary address to the annual conference of the Sociedad Chilena de Mecanica Computational. He then lectured at the Universidad De La Frontera and will be lecturing at other universities in Chile. He is currently teaching a short course in the mechanical engineering department of the University of Chile. The course emphasizes finite element analysis and mesh generation, the subject of his research with colleagues at the University of Chile. dfield08@gmail.com

Jae H. Lim (B.S. Comp. Sci. with Math. minor 2008) is employed as a Software Engineer in the Boulder-Denver area. Professional activities include Java/JSP web

development and he is a member of the National Scholars Honor Society. Jae is active in the Korean Presbyterian Church and Kingdom Hall Jehovah’s Witness; hobbies are poker, computer science and Warcraft III. One of his favorite mathematics faculty members is Prof. Richard Green. His home is in Westminster, CO. dlawogus844@gmail.com

Abby Patterson (B.A. Math. 2004 with Distinction) currently works for Crestone Capital Advisors in Boulder, CO as an investment analyst for a select group of wealthy clients. At CU Abby minored in economics and recently completed the CFA (Chartered Financial Analyst) program. Her work has her traveling all over the world, last year in Hong Kong, Rome, Ireland and London. She writes: “I loved the Mathematics Department at CU for all the small classes. It made the university feel a lot more close knit. I always recommend Math as a major. I think it teaches people how to think, learn and problem solve. Even though I chose to pursue finance as a career, I feel my Math degree prepared me well for the dynamic financial markets and all their complications. I’m considering Math for a graduate degree and will definitely consider CU again!” Abby lives in Boulder, CO. abbyoneill@hotmail.com

Keith Lowell Phillips (B.A. Math 1959), retired professor of mathematics at CU Colorado Springs, recently returned from a trip to Arcata, CA to visit two daughters and three grandsons. They played on the beach, hiked in the redwoods, pruned blackberry bushes, played baseball and basketball. Keith plans to continue with research and writing. Other hobbies include biking, hiking and walking his dog. kphillips@uccs.edu



Mary Porter (M.A. Math. 1987) writes: “Hi to Professor Wm. Jones and Professor K. Goodrich! I was a TA for them during my time at CU (1985-87). This was many years ago, but they may remember me as a close friend of Dennis Cumro and Regina Aragon. After CU I moved to Syracuse, NY, where I earned my PhD in mathematics education at Syracuse University. I now live in South Bend, Indiana, and am a professor of mathematics at Saint Mary’s College in

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News from Alums, (continued from p. 8)

Notre Dame, Indiana. I love my job and am enjoying life in South Bend. My partner and I are active in the LGBT community have two cute kittens and enjoy getting together with friends to play board games, have dinner, etc. Although I was only at CU for two years, I have many fond memories of my friends, classmates and professors. I've told my students a story that Professor Goodrich told us, about how his professor would write the test questions on the chalk board and the students had to quickly copy them down before the professor erased the board to write more questions. I enjoy reading Prime Bits." mporter@saintmarys.edu

Norman H. Smith (Ed.D. Math 1961) is now retired. He and his wife, Zula F. Smith (B.A. 1959) live at 2770 Cambridge Lane, Mt. Dora, FL 32757. Norman's thesis advisor was Harold M. Anderson.

Nancy Owen Stainton (B.A. Math. 1978) is a Software Engineer/Manager since 1979 to present. In the 1970s she was Nancy Owen. She is a member of the Portrait Society of America. She enjoys art, music and travel in Europe. Her volunteer work is for marching bands and teaching Buddhism. Nancy writes that she has 1 husband and 2 daughters. "The campus was beautiful; loved Macky Auditorium. Stayed in Sewell dorm." Nancy lives in San Jose, CA. stainton@ix.netcom.com

In Memoriam

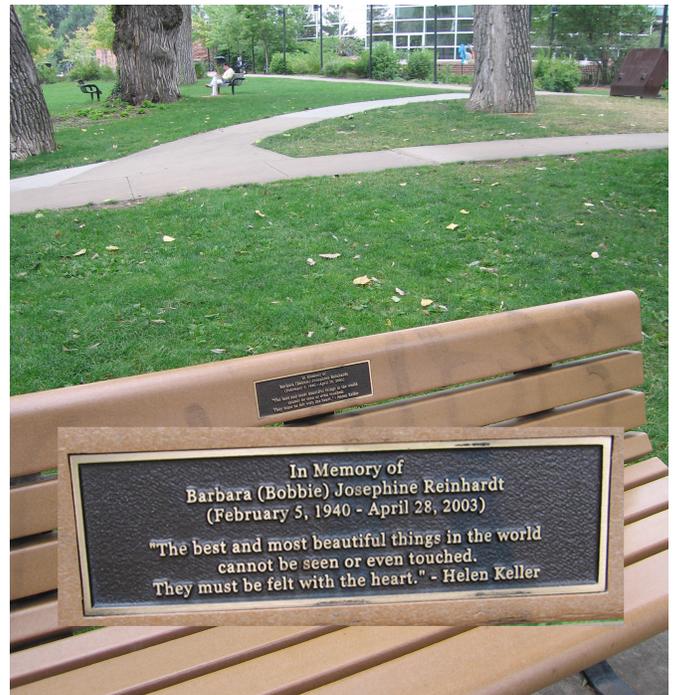


Jean Gillett Ferris (B.A. Math. 1941 passed away peacefully in her sleep during the afternoon of March 30th at her daughter Peggy's home in Bloomsdale, Missouri, surrounded by family members. She is survived by her younger sister Shirley Back of Gridley, CA, and her younger brother Philip Gillett (professor of mathematics at the University of Wisconsin, Marathon Center in Wausau for 44 years) of

Estes Park, CO. In the final years of her life, Jean lived with her daughter Anne in Littleton, CO, and then with her daughter Peggy in Missouri when her doctor suggested that living at a lower elevation would help her deteriorating health.

Jean Ferris joined the Mathematics Department as an instructor in 1965; in 1972 she became a Senior Instructor and also an Assistant Dean in the College of Arts and Sciences, working closely with Dean William E. Briggs. In the 1980s she resumed her teaching duties in mathematics where she remained until her retirement.

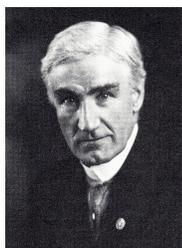
After Jean retired, she and her sister Shirley became interested in water color painting, and trained with a group of painters in the Gridley, CA area for several years. Jean and Shirley launched a small greeting card company that featured their artwork; their cards sold in California for a time.



A Memorial Bench for Barbara (Bobbie) Reinhardt has recently been placed on the south bank of Boulder Creek just east of the Boulder Public Library. Bobbie Reinhardt was married to the late William Reinhardt, a member of the Mathematics Department faculty for many years. The bench was given by their daughter, Gretchen Reinhardt. On the dedication plaque is written: In Memory of Barbara (Bobbie) Josephine Reinhardt (February 5, 1940 – April 28, 2003) "The best and most beautiful things in the world cannot be seen or even touched. They must be felt in the heart." Helen Keller

Mathematics Endowments

Endowments give vital support for teaching, research and scholarly work by the Mathematics Department. If you are interested in contributing to an endowment (new or existing), please contact the department chair, Professor Eric Stade, Department of Mathematics, University of Colorado, Boulder, CO 80309-0395, Eric.Stade@Colorado.edu or Pat Sullivan, University of Colorado Foundation, Arts and Sciences Development, 1305 University Avenue, Boulder, CO 80302, pat.sullivan@cufund.org. Existing endowments are described below.



Professor Ira M. DeLong was essentially the Mathematics Department at CU Boulder from 1888 until his retirement in 1925. After DeLong's death in 1942 his bequest

Ira DeLong Endowment

to the university of \$25,000 accumulated interest until 1963 when the faculty began using income from the endowment to fund an annual series of DeLong Lectures and undergraduate prizes for the Putnam competition.

Kempner Mathematics Colloquium

The Kempner Colloquium began in 1963 in honor of Professor Aubrey J. Kempner who served as head of the Mathematics Department from 1925 until he retired in 1949. Kempner gave the inaugural lecture on Reminiscences of the University of Goettingen where he received his Ph.D. degree under Edmund Landau in 1911. Kempner continued to take an active interest in the department until his death in 1973. The Kempner Colloquium Endowment was established in 1995 by gifts from faculty and alums including a major gift of \$25,000 from Dr. William J. LeVeque (B.A. 1944). LeVeque wanted to perpetuate the memory of the CU professor who had greatly influenced his life and distinguished career in mathematics. The weekly colloquium on topics of broad mathematical interest is essential for maintaining a vibrant learning environment.



Aubrey Kempner (left) with Burton Jones at Kempner home in 1952

B. W. Jones and W. E. Briggs Teaching Excellence Awards



Burton W. Jones



William E. Briggs

The Burton W. Jones Teaching Excellence Award was created in 1984 by gifts from the Mathematics Department faculty to honor their colleague for his long and distinguished service as a member of the faculty from 1949 to 1971 and department chair from 1949 to 1963. When Professor

William E. Briggs retired in 1988, gifts were made by faculty of mathematics and other Arts and Sciences departments for a memorial in recognition of his distinguished service as a faculty member (1955-1988) and as Dean of the College of Arts and Sciences (1963-1980). Since Briggs and Jones had been close friends who greatly valued good teaching, it was decided in 2007 to fund a separate William E. Briggs Teaching Excellence Award with both awards funded by a combined endowment. Each year the Burton W. Jones award is given to a veteran graduate student teaching assistant (TA) in the Mathematics Department for outstanding teaching accomplishments. The William E. Briggs award is given each year to a first-year TA in the Mathematics Department for outstanding teaching accomplishments.

William Reinhardt Memorial Lectures

The William Reinhardt Memorial Lecture Endowment was established in the University of Colorado Foundation in 2001 by family, colleagues and friends. Professor Reinhardt was a Mathematics Department faculty member from 1967

until his untimely death on June 22, 1998 at the age of 59. Reinhardt was deeply interested in the foundations and philosophy of mathematics, occasionally teaching courses in the Department of Philosophy.

W. J. Thron Mathematics Fellowship



In 1999 Professor Emeritus Wolfgang Joseph Thron expressed his faith in and devotion to the University of Colorado with a gift of \$216,000 to endow the W. J. THRON MATHEMATICS FELLOWSHIP awarded each year to an outstanding graduate student in the Mathematics Department. Thron was a member of the Mathematics Department from 1954 until he retired in 1985. He served as

department chair from 1972 to 1974 and he was thesis advisor for 21 Ph.D. students. In 1980 Thron was elected to the Royal Norwegian Society for Sciences and Letters (Det Kongelige Norske Videnskapers Selskap) for outstanding creative research in mathematics and for his great inspiration to others to do creative work. He was awarded the University of Colorado Medal for outstanding contributions to the university and for his distinguished career as a scholar, teacher and research mathematician.

Frances C. Stribic Scholarships

Frances Stribic was a member of the Mathematics faculty from 1926 until she retired in 1965. Finding a need for someone to teach statistics, she prepared herself in that subject and not only taught it for a number of years but also did research applications jointly with psychology Professor Dorothy (Happy) Martin. Professor Stribic was an outstanding teacher, well respected by her students and colleagues. In 1990 her friend Happy Martin established the Stribic Scholarship awarded each year to a female graduate

student chosen by the faculty for excellence in mathematics scholarship.



Frances Stribic (left) and Happy Martin

Adele Leonhardy Memorial Scholarship

The Adele Leonhardy (B.A. 1924) Memorial Scholarship was established by a gift from her estate. Awards are made to graduate students or upper division A&S undergraduates majoring in mathematics. Recipients must demonstrate excellence in their studies and must be preparing to teach mathematics.

Adele Leonhardy was born in Carbondale, Colorado and grew up in Fruita near Grand Junction. While attending the University of Colorado from 1917 to 1924 she taught

elementary school in Boulder to pay for her college education. After graduate work at the Universities of Chicago and Missouri she taught mathematics at Stephens College until her retirement in 1967. Professor Leonhardy understood the difficulty of working one's way through college and she dedicated her life to teaching. Her gift to the University of Colorado will enable students from future generations to become teachers of mathematics.

Burnett Chandler Meyer Endowment



The Mathematics Department has established a two-year postdoctoral position called the Burnett Meyer Instructorship, with the first appointment in August 2009.

Candidates are considered who have a Ph.D. degree in any area of mathematics including mathematics education. Selection is based on strong evidence of teaching and research. The position has a

teaching load of three courses per year.

The Burnett Meyer Instructorship is funded by a bequest of more than \$2,000,000 from the estate of the late Professor Emeritus Burnett Chandler Meyer who was a member of the CU Boulder faculty from 1957 to 1990. The bequest is to be used for the benefit of students and faculty. A portrait and plaque in honor of Professor Meyer has been placed in the Mathematics Building.

Colorado

University of Colorado at Boulder

Department of Mathematics
395 UCB
Boulder, Colorado 80309-0395

Mathematics Department Donors 2007 – 2009

The Mathematics Department faculty and students would like to thank all of the generous donors for their gifts to the department. Your support enables us to bring colloquium speakers (DeLong, Kempner and Reinhardt) to the campus, to offer scholarships to our students (Leonhardy, Stribic and Thron) and to grant awards to outstanding teaching assistants (B.W. Jones & W.E. Briggs). You also make possible the publication of the newsletter, Prime Bits. You can continue your support by completing the forms, STAYING IN TOUCH and the MATHEMATICS DEPARTMENT 2009 ANNUAL FUND and returning them to the given addresses. Contributions to the Mathematics Department through the CU Foundation are tax deductible.

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