



An update on graduate student activities in Mechanical & Aerospace Engineering

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RECENT MAE GRADUATES AND STUDENTS COMPLETING THEIR A OR B EXAM

Congratulations to recent MAE graduates

Eve Donnelly, Ph. D.
 Jobie Gerken, Ph. D.
 Shi Jin, Ph. D.
 Madhusudhan Venkadesan, Ph. D.

Nicolas Estevez, M.S.
 John Krenzel, M.S.
 Zeke Smith, M.S.

Congratulations to students recently passing their B-Exam

Jacqueline Cole
 Veronica Santos
 Sathyanarayana Ayyalasomayjula

Congratulations to students recently passing their A-Exam

Atif Chaudhry
 Baskar Ganapathysubramanian
 Matthew Horowitz

Juan Isaza
Timothy Morse
Oliver Purwin
Michael Sherback
Brett Streetman
Yanjun Xia
Viktor Zykov

MAE GRADUATE STUDENT AWARDS AND RECOGNITIONS

Smith receives best poster award at Cornell NanoScale Facility Annual Meeting

Zeke Smith received "Best Poster" award at the Cornell NanoScale Facility Annual Meeting in Duffield Hall Atrium on 21 September 2006 for his poster titled: "Particle Manipulation by Insulative Electrodeless Dielectrophoresis in a Polymer Microchannel," with authors A.E. Smith, B.G. Hawkins, Y.A. Syed, and B.J. Kirby.

Tolley receives NSERC Postgraduate Scholarship

Michael Tolley was awarded a Natural Sciences and Engineering Research Council of Canada Postgraduate Scholarship (equivalent to a fellowship) for this year. The Canadian government gives out a very limited number of these awards to Canadians studying abroad.

Venkadesan receives 2006 Biomechanics Award

Madhusudhan Venkadesan received the 2006 Journal of Biomechanics Award at the 2006 American Society of Biomechanics Annual Meeting for his paper, "Dynamic Multisensory Integration at the Boundary of Instability is Explained by a Simple Data-Based Model". Co-authors are J. Guckenheimer and F. Valero-Cuevas. The award, sponsored by Elsevier Science Ltd., is made in recognition of substantive and conceptually novel mechanics approaches explaining how biological systems function. The awardee is provided with the opportunity to publish the winning paper in the Journal of Biomechanics, and receives a cash price.

STUDENT SEMINAR SERIES

The SiGMA Student Seminar Series was a great success this semester. Once a month, around 40 graduate students gathered to hear two of their peers speak on their research, with lunch provided. The talks are general 15 minute presentations designed to keep MAE grads up to date on the various research topics being pursued in the department. The seminars also give speakers practice before presenting at A or B Exams, conferences, or job talks.

The seminar series will continue this spring. The first talks are scheduled for February 8. All SiGMA members are invited to attend. If you are interested in speaking at a seminar please contact Brett Streetman (bjs52).

A special thanks to the fall semester speakers:

Todd Humphries – “Revolutions in GPS”

Mike Moorhead – “Using Photothermal Deflection Spectroscopy (PDS) to Determine the Thermal Properties of Multilayered Thin Films”

Oliver Purwin – “Cornell RoboCup: The Secret of Our Success”

Timothy Morse – “Flow-Induced Vibration or Why the Tacoma Narrows Bridge Fell Down”

Mike Tolley – "Directed Fluidic Assembly of Microscale Tiles"

Madhu Venkadesan – "Dexterous Manipulation in Humans: Characterizing a Noisy Dynamical System"

PRACTICE Q EXAMS

This January, SiGMA continued to help new grad students to prepare for their Q Exams. Students preparing for the Q were asked to answer questions in front of a panel of grad students in a simulation of the exam. Feedback from this and past semesters shows that the practice exam is quite helpful in preparing a new student for the Q.

Thanks to those helping give practice exams: Dave Schneider, Mike Sherback, Tim Reissman, Justin Atchison, Bernardo Cordovez, Mike Moorhead, and Maureen Lynch.

HAPPY HOURS

September marked the start of this Fall's SiGMA happy hours with "The Death of the Cool," a tribute to Miles Davis. The songs of key albums throughout Davis' career set the mood for over 75 graduate students and faculty as a slide show explained the historical significance and biographical context of each album.

Bernardo Cordovez, Edgar Cuji, Flor Alicia Medina, Juan Salazar, and Ana M Vallejo enthusiastically shared the Latin cultural celebration of Dia de los Muertos (Day of the Dead) with the department on November 1st. An abundance of marigolds, colorful banners and jovial skulls transformed Upton Lounge into a festive banquet hall. The evening concluded as the crowd joined to burn a collection of messages written to deceased friends.

Finally, the department gathered on November 30th to enjoy the non-academic talents of students and faculty alike at the "SiGMA Open Mic Night". Erfan Parvez, Kate McGinnis, Jonathan Hiller, John Dietl, Savannah James, Atif Chaudry, Mekala Krishnan (and band), and Prof. David Caughey impressed, entertained, and amused a packed house.

Starting the new year, SiGMA offered a delicious respite from the first-week stresses of Spring semester by hosting a "Comfort Foods and Congenial Company" themed happy hour. Syllabi,

rubrics, and paper deadlines were quickly forgotten with a plateful of meatloaf, mashed potatoes, and tapioca pudding.

This February 22 we will be sponsoring a Chinese New Year celebration! Please email Justin Atchison (jaa73) if you're interested in helping out.

SIGMA INTRAMURAL SPORTS

This fall, SiGMA sponsored a soccer team in the Cornell competitive men's open league. SiGMA went 4-1 in the regular season and won their first two playoff games, making it to the semi-finals. Special congratulations to the team MVPs Juan Salazar and David Korda.

SiGMA will be sponsoring a team in the indoor soccer tournament on April 14. An announcement will be made in late March.

SiGMA will also be sponsoring a softball team this spring. The season begins on March 11. An announcement will be made in late February.

RECENT GRADUATE STUDENT MARRIAGES AND BIRTHS

Congratulations to graduate students who were recently married

- Daniel Brown married Eliza Ciccotti in August
- Megan Thompson married Judson Powers in August
- Darren Zanon married Melissa Baker in November
- Danelle Schrader married Ashish Shah in January

Congratulations to graduate students recently having children

- Liuyan Lu and Zhuyin Ren had a baby girl in December
- Satish and Yolanda Degala had a baby girl in January
- Garry and Kari Hayeck had twin girls in January

If you have information to be distributed in the next newsletter, or if you are interested in SiGMA activities, please contact one of the SiGMA officers:

- Timothy Morse – President – tlm39
- Brett Streetman – Professional Development Director – bjs52
- Justin Atchison – Social Directory – jaa73
- Daniel Brown – Vice President – db328
- Maureen Lynch – Treasurer – mel44