Physics Department

• Welcome new and returning students, faculty, and staff
• General announcements
• Physics colloquium series -- PHY 301/601
• Careers in physics program
• SPS & T-shirt design contest
• Undergraduate honors and award programs
• Lab teaching assistant, tutoring, and grading opportunities
• Research opportunities
• Presentations by undergraduate research students
Welcome new and returning students, faculty, and staff

Please see Judy Swicegood in Olin 100
To prepare your photo for our display case.

Please check your mailboxes in the Physics Dept. Office (Olin 100 or 108) for important announcements

- All declared physics majors have mailboxes in Rm. 108 and graduate students have mailboxes in Rm. 100.
- Judy needs some forms by Aug. 30th from all undergraduate graders and teaching assistants.
- To obtain keys to rooms in Olin Physical Lab, please see Machele Cable in Olin 110.
Physics Department

• Welcome new and returning students, faculty, and staff –

Undergraduate Physics Majors:

Welcome new and returning students, faculty, and staff –

Physics Graduate Students:


Graduated during the past year:

Kris T. Huang (Ph. D. with Dany Kim-Shapiro)
Ping Tang (Ph. D. with Natalie Holzwarth)
David Evanich (M. S. with Greg Cook and Paul Anderson)
Physics Department

Physics Department VIP Staff:

Judy Swicegood – Administrative Coordinator
Gale Burns – Secretary
Chin-Wan Yip – Instructional Technology Analyst
Machele Cable – Physics Laboratory Manager
Bob Morris – Machine Shop Instructor
Burak Uçer – Laser specialist
Tim Miller – Computer cluster administrator and guru

Research Group VIP Staff:

Fetrow Group: Stacy Knutson
Holzwarth Group: Yaojun Du, Ping Tang
Kim-Shapiro Group: Swati Basu, Xiaojun He, Jinming Huang, Mahesh Joshi, Howard Shields
Macosko Group: George Holzwarth
NanoTech: Jiwen Liu, Manoj Namboothiry, Michael Schmid
Physics Department

Physics Department Faculty:

Rick Matthews (Chair) – Olin 217
Paul Anderson – Olin 308 (on leave)
Keith Bonin – Olin 310
Bob Brehme (emeritus)
Eric Carlson – Olin 306
David Carroll – Olin 214
Forrest Charnock – Olin 303B
Greg Cook – Olin 304
Jacquelyn Fetrow – Olin 301B
Martin Guthold – Olin 302

George Holzwarth (emeritus) – Olin 300
Natalie Holzwarth – Olin 300
William Kerr – Olin 310
Janna Levin – Winston 020
Jed Macosko – Olin 215
Dany Kim-Shapiro – Olin 208
Fred Salsbury – Olin 301A
Howard Shields (emeritus) – Olin 216
Jack Williams (emeritus)
Richard Williams – Olin 212
Physics Department

http://www.wfu.edu/physics

Physics news
Physics colloquium listings
Special programs

Upcoming Events

08-24-2006 - 3:15 PM
Welcoming "Tea"
(Olin Lobby) -- Introduction program will begin in Olin 107 at 3 PM.

08-29-2006 - 11 AM
Linux Tutorial for laptops
Dr. Tim Miller
(Manchester, Rm 201)

08-31-2006 - 4 PM
WFDD Interview with Daniel Kim-Shapiro

Petrow and John win Teaching Innovation Award

09-05-2006 - 11 AM
Career advising event -- Dr. Peter Groves,
Research Analyst, CNA Corporation (Olin Lounge)
FREE PIZZA!!
WFU Physics Colloquium Schedule -- Fall 2006

All seminars will be held at 4 PM in Room 101 of Olin Physical Laboratory (unless noted otherwise); there will be refreshments at 3:30 PM in the lobby prior to each seminar.

Thurs. Aug. 24, 2006  Welcoming "Tea", announcements, and student presentations

Thurs. Aug. 31, 2006 Professor David Keller, U. New Mexico -- Machines that Replicate Genetic Information

Thurs. Sept. 7, 2006 Professor Nikolay V. Dokholyan, UNC --

Thurs. Sept. 14, 2006 Professor Andy Karplus, U. Oregon -- Ramachandran revisited: Conformational energetics and conformation dependent peptide geometries

Thurs. Sept. 21, 2006 WFU Physics Research, Part I --

Thurs. Sept. 28, 2006 Annual Alumni Colloquium -- Professor Louis Keimer, Coastal Carolina University --

Thurs. Oct. 5, 2006 WFU Physics Research, Part II --

Thurs. Oct. 12, 2006 (Fall break 10/13/06)


Thurs. Nov. 2, 2006
Physics Department

Careers in physics program

Coordinated by Professor Dany Kim-Shapiro –

Department of Physics

Career Advising Event

Schedule of Events

- Tues. September 5: Peter Groves, Ph.D -- CNA Corporation
- Tues. October 10: Boyd Rogers, Ph.D -- Unitive, An Amkor Company
- Tues. November 14: Eben Thoma, Ph.D -- Environmental Protection Agency
  11 AM Olin Physical Lab Lounge. Free Pizza
Physics Department

• SPS (Society of Physics Students) & T-shirt design contest
  – Coordinated by Professor Martin Guthold – first meeting in a few weeks
Physics Department

- Undergraduate honors and award programs
  - Presentation by Professor W. C. Kerr.
Physics Department

• Lab TA, Tutorial, and Grading Opportunities
  – Undergraduate TA’s and graders have forms in their mail boxes and should return them to Judy Swicegood soon.
  – Announcements by Professor Keith Bonin
Physics Department

• Research opportunities
  – Undergraduate students are especially encouraged to participate; course credit, Wake Forest University Fellowships, or individual faculty grants
The Wake Forest Research Fellowship Program is designed to encourage individual Wake Forest undergraduates to join their professors as junior partners on scholarly research projects. While improving opportunities for mentoring and helping students to progress into advanced work, these are also a means of supporting successful and dedicated students with financial scholarships. Up to 55 competitive, merit-based fellowships will financially assist students who collaborate with faculty mentors. Since the Plan for the Class of 2000 stated that some fellowships should be used to encourage the professional growth of students from groups that are under-represented in certain disciplines, ten of these Fellowships will be set aside for the Women in Science Program.

For the summer of 2006, up to 55 fellowships will be awarded. Each award will provide a $4,000.00 stipend. Fellows will be expected to engage in research fully across a 10-week period. It will not be possible to enroll
<table>
<thead>
<tr>
<th>Research Group</th>
<th>Area of research</th>
<th>Slots</th>
<th>Current students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keith Bonin</td>
<td>Laser and optical physics, biophysics</td>
<td>~1</td>
<td>Doug Bonessi, Johathan Salek*</td>
</tr>
<tr>
<td>David Carroll</td>
<td>Nano-technology</td>
<td>~3</td>
<td>Faith Coldren, Xuanfeng Ding, Jerry Kielbasa, Nicole Levi, Baxter McGuirt, Jay Patel*</td>
</tr>
<tr>
<td>Martin Guthold</td>
<td>Atomic force microscopy; Biophysics</td>
<td>~1</td>
<td>Wenhua Liu, Lu Peng, Christine Carlisle, Patrick Nelli, David Rosile, Eric Sparks*</td>
</tr>
<tr>
<td>Jed Macosko</td>
<td>Biophysics</td>
<td>~1</td>
<td>Todd Falleson, Katherine Baysinger, Thomas Cahyuti, Ernest Chisena, Andrew Wall*</td>
</tr>
<tr>
<td>Dany Kim-Shapiro</td>
<td>Biophysics</td>
<td>~1</td>
<td>Ivan Azarov, Anne Jeffers, Elizabeth Gordon*</td>
</tr>
<tr>
<td>Richard Williams</td>
<td>Solid state and laser physics</td>
<td>~2</td>
<td>Jerry Kielbasa</td>
</tr>
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*Undergraduate students
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<td>Paul Anderson</td>
<td>Gravitational physics</td>
<td>~1</td>
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</tr>
<tr>
<td>Eric Carlson</td>
<td>Particle physics and astrophysics</td>
<td>~1</td>
<td>Bill Hirsch, Nick Dellaripa*</td>
</tr>
<tr>
<td>Greg Cook</td>
<td>Gravitational physics and computational astrophysics</td>
<td>~1</td>
<td>Jason Grigsby</td>
</tr>
<tr>
<td>Jacquelyn Fetrow</td>
<td>Computational biophysics</td>
<td>~3</td>
<td>Shane Ahlers, Audra Lemley*</td>
</tr>
<tr>
<td>Natalie Holzwarth</td>
<td>Computational materials physics</td>
<td>~2</td>
<td>Xiao Xu, Kevin Conley</td>
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<tr>
<td>William Kerr</td>
<td>Solid state physics</td>
<td>~1</td>
<td>William Hodge, Matthew Rave</td>
</tr>
<tr>
<td>Rick Matthews</td>
<td>Computational solid state physics</td>
<td>~1</td>
<td></td>
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<tr>
<td>Fred Salsbury</td>
<td>Computational biophysics</td>
<td>~3</td>
<td>Brian Kolb, Ye Yuan</td>
</tr>
</tbody>
</table>

*Undergraduate students
Undergraduate physics students who participated in research this summer:

At WFU:

Beth Gordon (Dany Kim-Shapiro)
Jonathan Selek (Keith Bonin)
Audra Lemley (Jacquelyn Fetrow)
Ernest Chisena, Andrew Wall (Jed Macosko & G. Holzwarth)
Patrick Nelli (Martin Guthold)