Physics Department

- SPS & T-shirt design contest
- Research opportunities
- Presentations by undergraduate research students
- Faculty presentations -- Part I
http://www.wfu.edu/physics
WFU Physics Colloquium Schedule -- Fall 2005

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. 25, 2005 Physics Department welcoming statements and announcements (3:45 PM) Professor Pete Santago, WFUMS -- Developments in the Virginia Tech -- Wake Forest University School of Biomedical Engineering and Sciences (4:00 PM)

Thurs. Sept. 1, 2005 Undergraduate research presentations and faculty research presentations, Part I

Thurs. Sept. 8, 2005 Professor Harold Baranger, Duke -- Interference and Interactions in Electronic Nanostructures

Thurs. Sept. 15, 2005 Faculty research presentations, Part II

Thurs. Sept. 22, 2005 Professor Chandran Sabanayagam, U. Maryland --

Thurs. Sept. 29, 2005 Professor Richard Creswick, U. South Carolina --

Thurs. Oct. 6, 2005 Professor Paul Selvin, UIUC --

Thurs. Oct. 13, 2005 (Fall break 10/14/05)

Thurs. Oct. 20, 2005 (no seminar due to Inauguration of Wake Forest President)

Thurs. Oct. 27, 2005

Thurs. Nov. 3, 2005 Professor Lois Pollack, Cornell U. --

Thurs. Nov. 10, 2005 Professor John Simon, Duke --
Physics Department

• SPS (Society of Physics Students)
  – Coordinated by Professor Martin Guthold – first meeting in a few weeks
• T-shirt design contest
  – T-shirt comments by Natalie Holzwarth
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 undergraduates to join their professors as junior partners on scholarly research projects. While improving opportunities for mentoring and helping students progress into advanced work, these are also means of supporting successful and dedicated students with financial scholarships.
RESEARCH FELLOWSHIP PROGRAM

ABOUT THE PROGRAM

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 150 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 2004 and the academic year 2004-2005, three research formats will be available:

A. A $2,000 stipend will be available to those who work the equivalent of 210-240 hours across a minimum of an 8-week period in the summer,
B. Stipends of $3,000 will be offered to those who commit themselves to a 10-week, 40-hour per week research program in the summer,
C. Stipends of $2,000 will be available for the academic year 2004-2005 or the spring and fall of 2005 for those who will work an average of 7 - 8 hours per week across the two semesters.
# Physics Research Participation – Experimental Physics

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Area of research</th>
<th>Slots</th>
<th>Current students</th>
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</thead>
<tbody>
<tr>
<td>Keith Bonin</td>
<td>Laser and optical physics, biophysics</td>
<td>~1</td>
<td>Doug Bonessi, <strong>Johathan Salek</strong>*</td>
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<tr>
<td>David Carroll</td>
<td>Nano-technology</td>
<td></td>
<td>Faith Coldren, Jerry Kielbas, Nicole Levi</td>
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<tr>
<td>Martin Guthold</td>
<td>Atomic force microscopy; Biophysics</td>
<td>~1</td>
<td>Wenhua Liu, Lu Peng, <strong>Eric Sparks</strong>*</td>
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<tr>
<td>Jed Macosko</td>
<td>Biophysics</td>
<td></td>
<td>Todd Falleson</td>
</tr>
<tr>
<td>Dany Kim-Shapiro</td>
<td>Biophysics</td>
<td>~1</td>
<td>Kris Huang, Anne Jeffers, Kevin Berardinelli, Elizabeth Gordon, Jared Hill, Rachel Maree, Stephen Reintjes*</td>
</tr>
<tr>
<td>Richard Williams</td>
<td>Solid state and laser physics</td>
<td>~2</td>
<td>Jerry Kielbas</td>
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*Undergraduate students
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<td>Paul Anderson</td>
<td>Gravitational physics</td>
<td>~1</td>
<td>David Evanich</td>
</tr>
<tr>
<td>Eric Carlson</td>
<td>Particle physics and astrophysics</td>
<td>~1</td>
<td>Bill Hirsch</td>
</tr>
<tr>
<td>Greg Cook</td>
<td>Gravitational physics and computational astrophysics</td>
<td>~1</td>
<td>David Evanich, Jason Grigsby</td>
</tr>
<tr>
<td>Jacquelyn Fetrow</td>
<td>Computational biophysics</td>
<td>~3</td>
<td>Shane Ahlers, Ashley Spooner*</td>
</tr>
<tr>
<td>Natalie Holzwarth</td>
<td>Computational materials physics</td>
<td>~2</td>
<td>Ping Tang, Xiao Xu, Kevin Conley</td>
</tr>
<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>
</tr>
<tr>
<td>Fred Salsbury</td>
<td>Computational biophysics</td>
<td>~3</td>
<td>Ye Yuan</td>
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</table>

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

At WFU:
  Jared Hill (Dany Kim-Shapiro)
  Eric Sparks (Martin Guthold)
  Shane Ahlers (Jacquelyn Fetrow)
  Matthew Caudill (now at Wash. U.) (Greg Cook)
  John Tumbleson (from Elon U.) (Natalie Holzwarth)