General University Information
President: Stuart Bell
Dean of Graduate School: Susan Carvalho
University website: http://www.ua.edu
School Type: Public
Setting: Suburban
Total Faculty: 1,435
Total Graduate Faculty: 1,005
Total number of Students: 38,563
Total number of Graduate Students: 5,258

Department Information
Department Chairman: Prof. Patrick R. LeClair, Chair
Department Contact: Nancy Pekera, Administrative Secretary
Total full-time faculty: 31
Total number of full-time equivalent positions: 31
Full-Time Graduate Students: 59
Female Full-Time Graduate Students: 11
First-Year Graduate Students: 16
Female First-Year Students: 7
Total Post Doctorates: 12

Department Address
514 University Boulevard
Tuscaloosa, AL 35487-0324
Phone: (205) 348-5050
Fax: (205) 348-5051
E-mail: npekera@ua.edu
Website: http://physics.ua.edu

ADMISSIONS
Admission Contact Information
Address admission inquiries to: Graduate School Office, Box 870118, Tuscaloosa, AL 35487-0118
Phone: (877) 824-7237
E-mail: graduate.school@ua.edu
Admissions website: http://graduate.ua.edu/prospects/application/

Application deadlines
Fall admission:
U.S. students: January 15
Int'l. students: January 15
Spring admission:
U.S. students: November 1
Int'l. students: June 1

Application fee
U.S. students: $65
Int'l. students: $80

Admissions are considered after the deadlines if positions are available. Full consideration is only guaranteed if the deadlines are met.

Admissions information
For Fall of 2017:
Number of applicants: 131
Number admitted: 27
Number enrolled: 15

Admission requirements
Bachelor's degree requirements: Bachelor's degree in Physics is required.
Minimum undergraduate GPA: 3.0

GRE requirements
The GRE is required.

Subjective GRE requirements
The Subjective GRE is not required.

TOEFL requirements
The TOEFL exam is required for students from non-English-speaking countries.
PBT score: 550
iBT score: 79

Other admissions information
Undergraduate preparation assumed: Halliday and Resnick, Fundamentals of Physics; Serway, Moses, and Moyer, Modern Physics; Symon, Mechanics; Reitz, Milford, Foundation of Electromagnetic Theory; Eisberg, Resnick, Quantum Physics of Atoms; etc.

TUITION
Tuition year 2018–19:
Tuition for in-state residents
Full-time students: $5,390 per semester
Tuition for out-of-state residents
Full-time students: $14,615 per semester
Credit hours per semester to be considered full-time: 9
Deferred tuition plan: Yes
Health insurance: Available at the cost of $1,248 per year.
Academic term: Semester
Number of first-year students who received full tuition waivers: 15

Teaching Assistants, Research Assistants, and Fellowships
Number of first-year
Teaching Assistants: 15
Fellowship students: 5
Average stipend per academic year
Teaching Assistant: $18,747
Research Assistant: $18,747
Fellowship student: $18,747
All first year students have guaranteed support for their first two semesters.

FINANCIAL AID
Application deadlines
Fall admission:
U.S. students: February 15
Int'l. students: February 15
Spring admission:
U.S. students: November 1
Int'l. students: June 1

Loans
Loans are available for U.S. students.
Loans are available for international students.
GAPSFAS application required: No
FAFSA application required: No

For further information
Address financial aid inquiries to: Office of Student Financial Aid, Box 870162, 106 Student Services Center, The University of Alabama, Tuscaloosa, AL 35487.
Phone: (855) 469-2262
E-mail: financialaid@ua.edu
Financial aid website: http://financialaid.ua.edu/
### SPECIAL EQUIPMENT, FACILITIES, OR PROGRAMS

Condensed matter work is facilitated by two clean rooms. Several sputtering systems are available for sample synthesis. Characterization equipment includes alternating-gradient and superconducting vibrating-sample magnetometers, as well as scanning and transmission electron microscopes, scanning atomic force and tunneling microscopes, and Auger and x-ray photoelectron spectroscopy.

On site facilities further include well-equipped laboratories for research in condensed-matter physics, high-energy physics, and image processing.

Supporting facilities include a machine shop, electronics shop, computer workstations, and direct access to the campus mainframe computer and the Alabama supercomputer. Faculty and students participate in the Center for Materials for Information Technology and the Tri-Campus Material Science Ph.D. Program.

### Table C—Separately Budgeted Research Expenditures by Research Specialty

<table>
<thead>
<tr>
<th>Research Specialty</th>
<th>No. of Grants</th>
<th>Expenditures ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astronomy</td>
<td>18</td>
<td>$1,946,210</td>
</tr>
<tr>
<td>Astrophysics</td>
<td>4</td>
<td>$163,090</td>
</tr>
<tr>
<td>Condensed Matter</td>
<td>30</td>
<td>$4,684,210</td>
</tr>
<tr>
<td>Experimental particle physics</td>
<td>29</td>
<td>$2,570,980</td>
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<tr>
<td>Theoretical particle physics</td>
<td>9</td>
<td>$262,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td><strong>$9,626,490</strong></td>
</tr>
</tbody>
</table>

### FACULTY

**Professor**


Keel, William C., Ph.D., University of California, Santa Cruz, 1982. *Astronomy*. Galactic nuclei, jets, and galaxy interactions.


White, Raymond E., Ph.D., University of Virginia, 1986. *Astronomy, Astrophysics*. Dynamics and hydrodynamics in galaxies and galaxy clusters.

**Associate Professor**


**Assistant Professor**


**Professor Emeritus**


Byrd, Gene G., Ph.D., University of Texas, Austin, 1974. *Astrophysics*. Theoretical astrophysics.


Hardee, Philip E., Ph.D., University of Maryland, 1976. *Astrophysics*. Theoretical and observational astrophysics.


**Adjunct Professor**

Biermann, Peter L., Ph.D., University of Gottingen, 1971. Theoretical astrophysics.

Crocker, Deborah A., Ph.D., University of Virginia, 1987. Observational astrophysics.


Pandey, Raghvendra K., Ph.D., University of Cologne, 1967. Experimental condensed matter physics.

**DEPARTMENTAL RESEARCH SPECIALTIES AND STAFF**

**Theoretical**

Astrophysics. Galactic dynamics; galaxy formation; galactic structure; extragalactic astronomy; high-energy astrophysics; stellar evolution; supernovae. Bailin, Biermann, Townsley.

Condensed Matter Physics. Electronic structure of solids; magnetic properties; hierarchical and renormalization-group methods; magnetic lattice models. Butler, Claudia Mewes, Sarker, Schwiete, Tse, Visscher.


**Experimental**

Astronomy. Black holes; galaxy evolution; galaxy morphology; spectroscopy of AGN; galaxy clusters; globular clusters; X-ray astronomy; X-ray binaries. Buta, Irwin, Keel, Nair, White.
