

California State
University Long Beach
Physics and Astronomy
2009-2010 Newsletter # 29

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IN THIS ISSUE: SEE BELOW AND MUCH, MUCH MORE

The Department: Excellent Results from External and Internal Reviews

New Faculty 2010

National Science
Foundation Early Career
Award Dr. Thomas Gredig
In the NSF's own description,
this is its "most prestigious
award in support of the early
career -development
activities of those teacher -
scholars who most effectively
integrate research and
education within the context
of the mission of their
organization.

Yohannes Abate Prashanth Jaikumar

Recipient of the College
of Natural Sciences and
Mathematics
2010 Outstanding
Thesis in the Physical
Sciences ,
Semirelativistic Few
Body Problems with
Matrix Continued
Fraction Methods ,

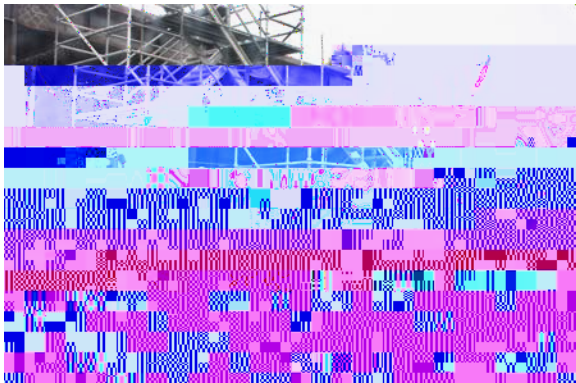
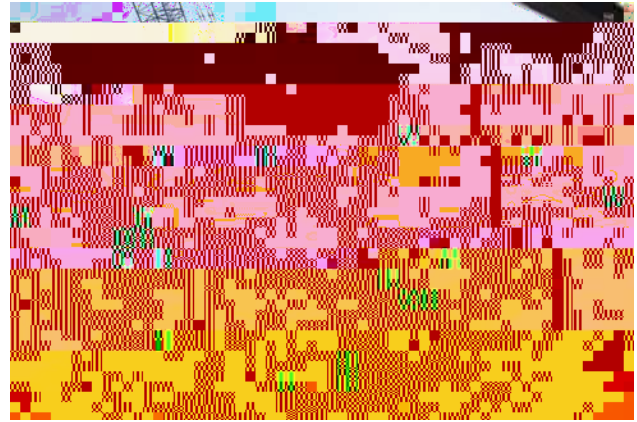
The Year In Review

The Department has recently hired two excellent physicists
Dr. Yohannes Abate Dr.
Prashanth Jaikumar

More Good News!

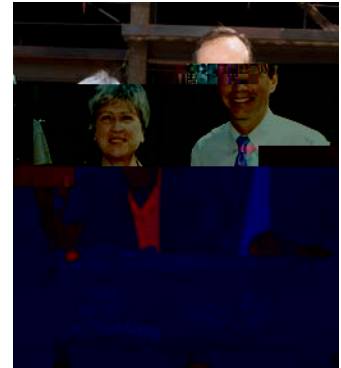
Hall of Science to open in January, 2011!

Immediately below, steel girders shape the new Hall of Science in June, 2009. The Hall will house the Physics and Astronomy Dept. on its second level.



Progress is seen above in late August, 2009.

Dean Lau, Kingsford, and President Alexander are shown signing the last brick on Sept. 20, 2009.



In May, 2010, the new roof observatory platform with 6 telescopes becomes reality.



In June, 2010, the building was almost completely enclosed in red bricks. Faculty offices (their maximum size is 110 sq. feet) is seen to the right. Above right is an interior view of one of two large halls that will be located on the ground level in the

Dr. Yohannes Abate:

Dr. Prashanth Jaikumar

Our Next Theoretical Physicist

Astronomy is the oldest of the physical sciences, practiced in one form or the other by the most ancient civilizations. My research addresses some of the key questions in modern Astrophysics and Cosmology: What powers fantastic astronomical events such as gamma-ray bursts and supernovae? How and where did the elements in the periodic table originate? What happens to the state of matter in the interior of neutron stars or black holes? I am looking forward to beginning an astrophysics initiative

CSULB SCHOLARLY AND CREATIVE ACTIVITIES AWARDS
 CONGRATULATIONS! SCAC Awards for AY 2009 - 2010

Andreas Bill	Influence of the Grain Shape Anisotropy on their Distribution in Crystallization Processes	Assigned Time
Thomas Gredig	Quasi One - Dimensional Magnetic Chairs in Iron Phthalocyanine	Summer Stipend
Chuheee Kwon	Physical Characterization of Gold Nano - Island Films	Assigned Time
Zoltan Papp	Study of the Alpha - Nucleon Interaction in Berillium_9 and Boron_9 Nucleus	Summer Stipend

This has been an important source of internal support for faculty, which, for 2010-11 for budgetary reasons, has unfortunately been temporarily suspended.

FACULTY CHANGES We are sorry to see them go.

RETIRED in 2008:

RECENT FACULTY SUCCESSES AND EXTERNAL FUNDING AWARDS

Congratulations to Co -PIs Chuhee Kwon and Galen Pickett of our department and Prof. Laura Henriques of the Dept. of Science Education on their new award of from PhysTEC, Physics Teacher Education Coalition !

Congratulations to graduate student

Congratulations to PI
Yohannes Abate who has just
received a grant of \$50,000 for
the two -year period from the
ACS-PRF. The project is titled
Plasmonics in the Nano -Scale for High
Efficiency Organic Photovoltaics

Report on Important Programs

WINTER SESSION UNDERGRADUATE PHYSICS EXPERIENCES

Another very successful Winter Program for Undergraduate Physics Experiences (UPE) was carried out in January, 2009 and January 2010. This important successful program is aimed at early recruitment and retention in our major. This program provides students very early in their physics studies, immediately after the introductory sequence of courses, an early, intensive, quick introduction to the physics faculty and their research.

During the 3- week winter break between semesters, we match interested students from our introductory physics courses with faculty mentors who assign brief, do-able projects. The projects allow the students an early entry into the life of the Department and our research labs. We are a relatively small department in a vital and necessary discipline, one that requires a strong effort at recruitment for majors. The students receive a stipend or an hourly wage to provide incentive during this period, during which they complete a project with a faculty member and meet other participating faculty members. Winter Session Undergraduate Physics Experiences is a strong recruiting tool with real academic substance and hands-on experiences for students to allow them a reasonable basis for choosing a major, whether it is physics or not.

WINTER SESSION 2009 UPE PROGRAM

FACULTY	UNDERGRADUATE STUDENTS
Andreas Bill	ANTHONY HARTMAN
Thomas Gredig	DANIEL BERGMAN
Jiyeong Gu	SARAH GREFE
Chuheee Kwon	ALEXEI SARNA; BRIAN CACHA
Alfred Leung	JOHN CULBERTSON; PATRICK CHANG
Zoltan Papp	DIAA ELDANAF

WINTER SEMESTER UPE 2010 PARTICIPANTS

FACULTY	UNDERGRADUATE STUDENTS
Yohannes Abate	CODI L. BONNEY , BRANDON HESSLER, JERRY OCHOA
Andreas Bill	MATTHEW BYRNE
Thomas Gredig	JOSHUA REED
Prashanth Jaikumar	CALVIN MILLER, JILL PESTANA
Alfred Leung	ANDREW BAKER

This program has shown itself to be a great opportunity for the students and an excellent tool for student success and retention in the major.

A similar program reaches one or two physics UG students and provides invaluable experience for the participants: SUMMER RESEARCH EXPERIENCES FOR UNDERGRADUATES.

Providing opportunities for students to learn in faculty research labs during the summer can be an important factor in retaining prospective majors in the discipline of physics. A total of three students have so far been able to participate in 2009 and 2010 using \$2500 scholarships.

STOP HERE FOR A MOMENT!

Great programs are available to consider for your support/contributions.

Your support can be directed in ways that you wish.

No state funds are used for scholarships or department events like the annual graduation party or for this newsletter. Students supported by scholarships, some of whom you see below and on the next page, all receive non -state funds that are contributed and are in accounts with the CSULB Foundation.

NAME	Scholarships	2009 - 2010
Culbertson, John	Milligan Scholarship	(\$1000 Fall, renewable in Spring \$1000)
Lokovic, Kimberly	Philip Ord Johnson Scholarship	(\$1000 AY)
Schrader, Min	Philip Ord Johnson Scholarship	(\$1000 AY)
Christiansen, David	Physics Dept Grad Summer Scholarship	(\$1000 AY)
Grefe, Sarah	Physics Dept Grad Summer Scholarship	(\$1000 AY)
Thomas, David	Physics Dept Scholarship Fund	(\$500 AY)
De Rojas, Julius	Scalettar Graduate Summer Scholarship	(\$2500)
Joshi, Toyanath	Scalettar Graduate Summer Scholarship	(\$2500)
Bergman, Daniel	Scalettar Scholarship	(\$1000 AY) \$500 Fall \$500 Spring
Burgess, Jesse	Scalettar Scholarship	(\$1000 AY) \$500 Fall \$500 Spring
Burgess, Jesse	UG Summer Research Exp	(\$2500 from Provost)
Rave, David	UG Summer Research Exp	(\$2500 from Provost)

NAME	Scholarships	2010 - 2011
Hessler, Brandon	Milligan Scholarship	(\$1000 Fall, renewable in Spring \$1000); Physics Dept. \$500 Summer
None		

