

In Memoriam:



Roland Hanson
1934-2009

Colleague remembered for kindness, talent

Roland Hanson, ASU Professor Emeritus of Physics, passed away August 28, 2009 after a two-year struggle with multiple myeloma. He leaves behind a remarkable legacy of research, teaching, and service that touched countless students and colleagues throughout his career.

Hanson obtained his Ph.D. in Physics from the University of Illinois, Urbana-Champaign in 1960. He was an assistant professor at Reed College for three years before taking on a postdoctoral position at Cornell. In 1966, Hanson joined the physics faculty at Arizona State University.

Former ASU Physics chair and Hanson colleague, Professor Emeritus Richard Jacob, recalls the seminar Hanson gave when interviewing for the ASU post.

"We had reserved our usual (seminar) location. It was a hall with several blackboards that raised and lowered, covering the entire width of the stage. An hour before his talk, Roland began painstakingly filling all the boards with small, precisely written equations and other material. He finished about five minutes before the talk was scheduled. Every

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Nobel laureate physicist Giacconi to deliver 2009 Distinguished Lecture

In celebration of the International Year of Astronomy, ASU Physics is delighted to host Riccardo Giacconi as featured speaker in the 2009 Distinguished Lecturer Series. Giacconi, University Professor at Johns Hopkins University, was awarded the Nobel Prize in Physics in 2002 for the initial work on x-ray astronomy he conducted while leading a research group at American Science and Engineering, Inc. from 1959-1973.

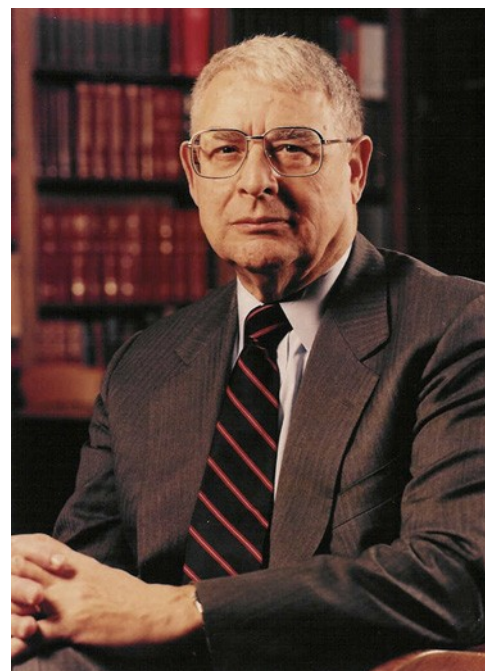
In 1962, that group discovered the first x-ray star, SCO X-1. This discovery sparked the beginning of x-ray astronomy, and led to the development of x-ray satellites *UHURU*, *Einstein*, and *Chandra*. Giacconi also discovered the cosmic x-ray background, many binary x-ray stars, and the massive x-ray halos of galaxy clusters.

He has been an important figure in astrophysics for nearly a half century and served as director of both the Space Telescope Science Institute and the European Southern Observatory during his career. He has played a leading role in the development of the largest telescopes in the world and has contributed significantly to observational capabilities in the modern era.

The ASU Physics Distinguished Lecturer Series, now in its sixth year, invites the public and academic communities to learn about the latest research from the most celebrated and accomplished scientists in physics and physics-related fields today. The two-part series includes an evening public lecture and a department colloquium the following afternoon. Public lecture content is appropriate for the lay community including high school

science students.

The series is free and open to the public. Seating is limited and no tickets are required. For more information, please visit http://physics.asu.edu/dist_lect/2009-fall or call 480.965.6794. School groups interested in attending the lecture should contact [Sabrina Mathues](#) via email.



Professor Riccardo Giacconi

PUBLIC LECTURE:

"A New Revolution in Astronomy 400 Years after Galileo"
Wednesday, October 28, 2009
7:30pm (Refreshments at 7:00pm)
Physical Sciences F-wing, Room 173

COLLOQUIUM:

"X-ray Astronomy 2009"
Thursday, October 29, 2009
3:15pm (Refreshments at 3:00pm)
Physical Sciences F-wing, Room 101

Roland Hanson, 1934-2009

board was compactly full. At that point, the Chemistry Chair came in and *re-minded* us that they had scheduled a special meeting in that room for the same hour. He insisted that Roland erase the boards completely. Roland did so and we met in the smaller room across the hall, where he had to fill in the boards as rapidly as he could while he talked. “

Despite the obstacle, the young physicist made it through his talk, impressing the faculty, and was hired at ASU. This began a career at ASU that spanned 33 years during which time he helped posi-

“(Roland) just loved to roll up his shirt sleeves and fiddle with stuff in the lab”

tion ASU as a world-leader in solid state physics. Hanson’s impact was broadly felt across the scientific community as his students took his experimental methods to myriad labs across the country.

But seminar talks, writing papers, and personal achievement always took a back seat to his real interest—working in the lab and talking one-on-one with students and colleagues.

Regents’ Professor and colleague Stuart Lindsay noted that Hanson “just loved to roll up his shirt sleeves and fiddle with

stuff in the lab.” Lindsay admired how Hanson was always available to talk with students and encourage them to try new things.

“When an undergraduate wanted to build powerful gas lasers, you can guess where (the student) went and in which lab the sparks and explosions were to be heard! He never ran out of time to share his enthusiasm for physics.”

Hanson’s love of teaching had a tremendous impact on the Advanced Laboratory (PHY334/PHY465) at ASU. He modeled the ASU lab on those of the MIT Junior Lab, considered among the finest in the country. He viewed laboratory coursework an essential part of student training.

“He was a superb teacher and (he) leaves an outstanding legacy to our department,” says ASU Physics Associate Professor and colleague Robert Marzke.

Hanson also enjoyed gardening, wood-working, biking, and related hobbies. These, too, seemed to be vehicles for helping others, drawing people together, and sharing experiences.

The door to the Hanson household was always open to young scientists just learning the ropes and Hanson’s many colleagues from around the world. It was a vibrant, welcoming environment that would, over the years, add to the charac-

Memorial Services

October 17th at 5:00 pm
Tempe Pyle Adult Center
655 E. Southern Avenue
Tempe, AZ ([map](#))

Donations in memory of
Roland Hanson may be made to the
ASU Department of Physics via
<http://physics.asu.edu/support>.
Please contact [Margaret Stuart](#)
for more information.

ter of a fledging physics department just coming on the scene in the ’60s and ’70s.

Hanson was preceded in death by his wife Joan and is survived by his sister Connie and brother Hugh; children Phyllis, Pamela, Julie and Jeffrey; and grandchildren Ruth, Heather, Claire, and Charles.

Editor’s note:

Special thanks to the many people who sent email reflections of Roland Hanson. Although there was not room to include them all here, they have been forwarded on to Roland’s daughter, Phyllis.



Calling all ASU Physics Alumni!

Last chance to be a part of the 2009 Physics Flash Homecoming issue! Send us an email with your name, degree and year of graduation, plus an update on any professional or personal successes and/or a picture you’d like to share.

It’s a great way to stay in touch!

Send your email today

to phyflash@asu.edu.

Congratulations to ASU Physics graduate student Joel Lynn. Joel and his wife, Jessica, welcomed their third child—Kelsey Olivia Lynn—on September 3, 2009. Little Kelsey (7 lbs./11 oz., 18 inches) She joins older brothers Isaac (5) and Owen (3).





From the Chair... A Valuable Resource

Midway through the semester, our students are working diligently to gain an understanding of the fundamental concepts of physics in an effort to solve exceedingly complex problems. Our faculty, staff and teaching assistants continue to explore new ways to deliver physics content and find elegant approaches to solving old and new problems.

Adding to that exploration are our emeriti professors. These distinguished colleagues have all built careers in teaching physics, and many have made substantial advances in research and scholarship. Their dedication to helping the university and ASU Physics is realized in numerous ways.

For me, I always appreciate conversations with former chairs Richard (Dick) Jacob and Howard Voss who generously share their insight and wonderful memories whenever they stop by. Many of the challenges and opportunities we face today are similar to those of past years and their perspective is helpful. There is undoubtedly a great deal to learn from our history.

Dick and Howard have embarked upon a project to chronicle that history – an effort to which we all can contribute. They note: *“Under the sponsorship of the Emeritus College and the Department, we are undertaking to write a history of the Physics Department at ASU. We intend for this to be more substantive than a simple chronology, and thus ask for your participation in*

providing materials: documents of historical significance, personal recollections and anecdotes, photographs, etc.” I encourage everyone to send comments and/or materials to Richard.Jacob@asu.edu or Howard.Voss@asu.edu, or send hard copies to the ASU Physics office.

Several of our emeriti professors continue to be active teachers and researchers. Dick, William Kaufman and John Page offer advanced courses. Nicole Herbots leads a very active research program focused on advancing semiconductor technology and David Hestenes continues to be involved with educational research initiatives.

But today, the professor emeritus most prominent in my thoughts is Roland Hanson. With his passing, we lose a beloved colleague as well as a tremendous resource for our students and faculty. For so many years, Roland was deeply committed to our advanced laboratory. That commitment continued beyond his retirement as he worked closely with Bob Marzke to support today's advanced lab. I remember well Roland's enthusiasm during our many discussions about experiments that our students found most exciting. His passion for physics and concern for our student learning were always evident.

Indeed, this is a defining characteristic of our entire emeriti faculty. We owe them all a great deal, and we extend our heartfelt thanks for their continued commitment to our students and faculty.

Sincerely,

mark your calendars

October 16 *Coffee Chat with the Chair*

ASU Physics Friends & Family (F²) are invited to meet with ASU Physics Chair Robert Nemanich at 9:00am. This casual event is an opportunity for parents of ASU Physics students to ask questions and learn more about what their students are doing in the program. To RSVP, please contact [Sabrina Mathues via email](#) or at 480.965.9075.

October 16-18 *Family Weekend*

Family weekend is a great time to come back to campus to visit your son or daughter. Various activities planned across campus throughout the weekend. For more information, please visit <http://students.asu.edu/familyweekend>.

October 28 *ASU Physics Distinguished Lecturer Series featuring Nobel laureate Riccardo Giacconi*

A pioneer in astrophysics, Giacconi will share his thoughts on astronomy 400 years after Galileo. Free public lecture at 7:30pm in the Bateman Physical Sciences, F-wing. Refreshments at 7:00pm. More information at http://physics.asu.edu/dist_lect/2009-fall.

October 31 *Homecoming 2009!*

Join ASU Physics as we celebrate Homecoming 2009! ASU Physics will participate in the ASU Homecoming Block Party. Our tent will feature examples of some of the most exciting research underway in the department. Stop by and visit us on the lawn just east of the Old Main Building. For more information, please visit <http://www.asu.edu/alumni/homecoming/>.