

The Department of Physics at The University of Texas at Dallas

Physics at 50





1962-2012

The Department of Physics at The University of Texas at Dallas

Celebrating 50 Years of Research, Teaching and Service

October 11, 2013, McDermott Suite, UT Dallas

In 1962, a group of distinguished scientists arrived in North Dallas to undertake an ambitious experiment – to build a "Community of Scholars" in the Southwest to conduct fundamental research and provide graduate-level education in science and mathematics. Their endeavors formed the Graduate Research Center of the Southwest and its research arm, the Southwest Center for Advanced Studies, which in 1969 would become The University of Texas at Dallas. The first research divisions were atmospheric and space sciences, geosciences, and mathematics and mathematical physics. Together these programs formed the core that would become the university's School of Natural Sciences and Mathematics.

As we look back on 50 years of research, teaching and service in the Department of Physics, we can take pride in our many scientific accomplishments and the tremendous success of our students and alumni. We have explored the solar system and the stars, investigated the building blocks of matter, and developed new technologies for energy, industry and medicine.



Then: The SCAS campus consisted of just the Founders Building. Now: The \$85 million, 192,000-square-foot Natural Science and Engineering Research Laboratory (NSERL) facility.

Front cover (L to R): Balloon preparation for high-altitude study; possible Higgs particle event; Ivor Robinson, head, SCAS Division of Mathematics and Mathematical Physics; lab work on DNA circuits.





A) **Then**: Students preparing for summer research projects in atmospheric and space sciences join division head Dr. Francis Johnson.. **Now**: Dr. Anvar Zakhidov discusses nanotechnology research with students.

B) Then: Dr. Frank Allum and Dr. Ricardo Palmeira display their cosmic ray experiment that flew on a spacecraft. Now: An Air Force satellite carries UT Dallas' CINDI experiment to study space weather.

Thanks to our talented faculty, our enthusiastic students, our tremendous staff, and our many friends and supporters, the physics department continues the tradition of excellence that began 50 years ago.

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Thank you for sharing in our 50th anniversary celebration.





D) **Then**: Dr. Kenneth McCracken (right) from atmospheric and space sciences confers with postdoc Dr. H.S. Ahluwalia. **Now**: Doctoral student Austin Peel works with Dr. Mustapha Ishak-Boushaki to study large-scale structures in the universe.

E) Then: Dr. William Hanson inspects an ionospheric probe prior to its launch on a Javelin rocket. Now: At UT Dallas's William B. Hanson Center for Space Sciences, Dr. Fabiano Rodrigues uses ground-based radars and GPS signals to study the upper atmosphere.

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