

The papers presented at this sectional meeting of the APS provide an interesting snapshot of the research being done in 1949 in both the Case and Western Reserve physics departments.

**Meeting of the Ohio Section of the American Physical Society
5 November 1949**

1. Apparatus for Acoustical Measurements with Pulse-modulated Ultra-sonic Waves
Yeager, Chessin, Bugosh, Hovorka; CIT
2. A High-frequency Barium Titanate Hydrophone
Bugosh, Yeager, Hovorka - CIT
3. A High-frequency Electro-acoustic Effect and Its Utilization in the Construction of Hydrophones
Bugosh, Yeager, Hovorka - CIT
4. The Condensation of Evaporated Metals on Surfaces
Olsen, Crittenden, Hoffman - CIT
5. Use of WWV Signals to time Pendulums
McCarthy - WRU
6. A Novel Magnetostriction Effect
Janofsky, Melamed, Beth - WRU
7. Report of Results of the science Abstracting Survey of APS-AIP
Hutchisson – CIT
8. An Adjustable Mounting for Large Mirrors
Haynie, OSU
9. Monochromatic Electron Groups in Long-life Manganese
Emmerick, Ballweg, Kurbatov – OSU
10. Radiations Emitted by Long-life Species of Nickel
Thomas, Kurbatov – OSU

Invited Paper: The Case Betatron and Plans for Its Use
Gregg – CIT

**Modern Physics in America
A Michelson-Morley Centennial Symposium
30-31 October 1987**

In celebration of the centennial of the Michelson-Morley ether drift experiment, the university, along with twelve other Cleveland educational and cultural institutions, organized "Light, Space, and Time – A Cleveland Festival 1987". The event was chaired by Dorothy Humel Hovorka, assisted by physics Professor Philip Taylor. The final event of this seven-month long celebration was a two-day symposium entitled "Modern Physics in America", organized by the Physics Department under the direction of co-chairmen, Professors William Fickinger and Kenneth Kowalski.

*The unique audience of the symposium included about six hundred physics graduate students who were bussed in from major universities within a 200-mile radius of Cleveland, from Toronto to East Lansing, from Pittsburgh to Cincinnati. Among the speakers, chairpersons, and guests-of-honor were nine Nobel Laureates (a few of whom would be so honored after 1987). All the expenses for the students and other guests were provided for by generous gifts from the 1525 Foundation (a special friend of the University), by the General Electric Foundation, and by NASA. The proceedings, including text of all the talks, have appeared in the AIP Conference Proceedings **169**, editors Fickinger and Kowalski.*

Here is a list of the lectures:

1. High Energy Colliders and Exploration of Small Distances: What are the Limits?
Wolfgang K. H. Panofsky
2. Reminiscences of My Father
Dorothy Michelson Livingston
3. Atoms, Molecules and Light
Arthur L. Schawlow
4. The Life of the Stars
Hans A. Bethe
5. Neutrinos from the Atmosphere and Beyond
Frederick Reines
6. The Search for gravitational Waves: Probing the Dynamics of Space-time
Peter F. Michelson
7. Chaos and Turbulence: An Experimental View
Albert J. Libchaber
8. A Physicist's View of Biology
Ivar Giaever
9. Strange Insulators, Strange Semiconductors, Strange Metals:
High T_c as a Case History in Condensed Matter Physics
Philip W. Anderson
10. Grand Challenges to Computational Science
Kenneth G. Wilson
11. The Supercollider: Assault on the Summit
Leon Lederman
12. Superstrings
Murray Gell-Mann
13. SN1987a: The Supernova of a Lifetime
Robert Kirshner
14. The Discovery and Physics of Superconductivity above 100K
Ching Wu Paul Chu

The Michelson Lectures and Awards

*The Michelson Lecture series, in its various incarnations, has brought eminent scientists and engineers to the CWRU campus for the past four decades. The series began in 1963 when the Trustees of the Case Institute of Technology established the **Michelson Award**.*

| | | |
|------|----------------------|--|
| 1963 | J. H. van Vleck | "Father of Modern Magnetism" |
| 1964 | H. K. Hartline | "Pioneering Biophysicist" |
| 1965 | Luis W. Alvarez | "Leading Nuclear Physicist" |
| 1966 | Edwin H. Land | "Lightness, Brightness and Reality" |
| 1967 | Martin Schwarzschild | "Structure and Evolution of the Stars" |

*The series was renamed the **Michelson-Morley Award** after the Federation of Case and Western Reserve, and continued almost every year until the 1990's.*

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|------|----------------------------|--|
| 1968 | John Bardeen | |
| 1970 | Charles H. Townes | |
| 1976 | John D. Roberts | |
| 1977 | Gene M. Amdahl | |
| 1978 | Harry G. Drickamer | |
| 1979 | Hans Wolfgang Liepmann | |
| 1980 | Frank Albert Cotton | |
| 1981 | Francis H. C. Crick | |
| 1982 | Michael Ellis Fisher | |
| 1983 | Subrahmanyan Chandrasekhar | |
| 1984 | Paul C. Lauterbur | |
| 1985 | Paul A. Fleury | |
| 1986 | Richard N. Zare | |
| 1987 | George A. Olah | |
| 1988 | John J. Hopfield | |
| 1989 | Herman F. Mark | |
| 1990 | Frederick Reines | |
| 1991 | John Cahn | |
| 1992 | Watt W. Webb | |

*The **Michelson Lectures** were established by the Physics Department in 1995.*

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|------|----------------------|---|
| 1995 | Joseph H. Taylor | "Binary Pulsars and Relativistic Gravity" |
| 1995 | Frank Wilczek | "Black Holes and Quantum Mechanics: Trouble on the Horizon?" |
| 1996 | Sheldon L. Glashow | "The Universe and the Particle: All Features Great and Small" |
| 1997 | Robert C. Richardson | "The Superfluidity of Helium-3" |
| 1999 | Michael E. Fisher | "Phase Transitions and Our Understanding of the Physical World" |
| 2000 | Gerhardus 't Hooft | "A Confrontation with Infinity" |
| 2003 | Stephen Chu | "What can we learn from looking at biological processes, one molecule at a time?" |

*In 2002, the **Michelson-Morley Award** was re-established. The award was made possible through an endowment from the 1987 Michelson Morley Centennial Celebration Committee, Dorothy Humel Hovorka, chairperson.*

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|------|-----------------|--------------------------------|
| 2002 | Frank Wilczek | "The World's Numerical Recipe" |
| 2003 | Stephen Hawking | "Brane New World" |

The Michelson Post-doctoral Prize Lectureship

This prize, established in 1997 by Profs. Lawrence Krauss and Glenn Starkman, is awarded annually to a junior scholar active in any field of physics. Each Fall, nominations are solicited from advisors and mentors at institutions throughout the U.S. Each Spring, a young scholar is chosen by the MPPL Committee based upon merit and recommendation, and is invited to spend one week in residence at CWRU, presenting one Colloquium and three Seminars.

The participants have been the following:

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|---------------|---|--|
| April 1998 | Thomas Walther | Texas A&M University |
| | Applications of Laser Spectroscopy | |
| February 1999 | Christopher Fuchs | California Institute of Technology |
| | Quantum Information Theory | |
| April 1999 | Joe Mohr | University of Chicago |
| | Cosmic X-rays, Galaxy Clusters, and Cosmology | |
| May 2000 | Keith Schwab | NSA, University of Maryland |
| | Macro- and Mesoscopic Quantum Effects | |
| April 2001 | Jonathan Feng | Massachusetts Institute of Technology |
| | Supersymmetry, Dark Matter, and the Cosmological Constant | |
| April 2002 | Re'em Sari | California Institute of Technology |
| | Gamma Ray Bursts, Extrasolar Planets | |
| April 2003 | Brian DeMarco | National Institute of Standards and Technology |
| | Quantum Behavior of an Atomic Fermi Gas | |
| April 2004 | Karsten Heeger | Lawrence Berkeley Laboratory |
| | Recent Discoveries in Neutrino Physics | |
| May 2005 | Yaroslav Tserkovnyak | Harvard University |
| | Collective Spin Dynamics in Magnetic Nanostructures | |