

The University of Texas at Austin

DEDICATION OF ROBERT LEE MOORE HALL

Friday, October 5, 1973, 5:30 p.m.

THE UNIVERSITY OF TEXAS AT AUSTIN





ROBERT LEE MOORE

PROFESSOR EMERITUS ROBERT LEE MOORE, who taught at The University of Texas from 1920 to 1969, is an eminent mathematician who gained world renown for his "point set theory," which is considered one of the most significant mathematical developments of modern times.

His major work, "Foundations of Point Set Theory," hailed as a monumental contribution to mathematics, deals with three large areas of point set topology: theory of continuous curves, topology of the plane and 2-sphere, and upper semi-continuous collections and decompositions.

A former president of the American Mathematical Society (1937-39), Dr. Moore is a member of the National Academy of Sciences and has the distinction of having had three of his former

doctoral students elected to the Academy (an achievement believed to be unsurpassed by any single professor in the nation).

In addition, two of Dr. Moore's former students from The University of Texas at Austin have been president of the American Mathematical Society, and four have been president of the Mathematical Association of America. Almost 50 students earned the Ph.D. degree under the venerable scholar.

In 1931–32, Dr. Moore was the first American mathematician chosen by the American Mathematical Society to be its visiting lecturer (the four previous lecturers having been Europeans). For 13 years he was associate editor of the Society's Transactions, and for a number of years he edited the Colloquium publications of that society.

Described as an inspiring and skillful teacher, Dr. Moore is said by one former student to know "when and how to raise an objection so as not to discourage the student but to inspire more care; he knows when and how to raise a question so as to inspire more effort."

The stimulating Socratic teaching style that Dr. Moore developed came to be known as the "Texas" method of training mathematicians—with Dr. Moore supplying theorems to the class and the students supplying proofs. Designed to encourage students to do individual work, the method emphasized constructive and creative activity in mathematics as a measure of merit and discouraged rote memorization of facts and techniques.

Realizing the impact of the "Texas" method in preparing research mathematicians, the Mathematical Association of America several years ago commissioned the preparation of a special film—"Challenge in the Classroom: The Methods of R. L. Moore"—to show at its national meetings.

Dr. Moore is listed in *Who's Who in America*, *International Who's Who*, *World Biography*, *American Men of Science* and other references. He is a Fellow and former vice president of the American Association for the Advancement of Science and member of the American Mathematical Society, Mathematical Association of America and Polish Mathematical Society.

Born November 14, 1882, in Dallas, Dr. Moore earned the Bachelor of Science and Master of Arts degrees from The University of Texas at Austin in 1901. He was a Fellow of mathematics at UT Austin in 1901–02 before going to the University of Chicago, where he received the Ph.D. in 1905.

Before joining the UT faculty in 1920 he taught at the University of Tennessee, Princeton University, Northwestern University, and the University of Pennsylvania.

Dr. and Mrs. Moore reside in Austin on the west side of the University campus.

The Guest Speakers

DR. RAYMOND L. WILDER

Visiting Professor of Mathematics, University of California, Santa Barbara; Member, National Academy of Sciences.

Formerly Research Professor of Mathematics, University of Michigan; President, American Mathematical Society; Colloquium Lecturer, American Mathematical Society; President, Mathematical Association of America; Vice President, American Association for the Advancement of Science.

MRS. GORDON T. WHYBURN

Lucille Whyburn, Associate Professor of Mathematics, University of Virginia at Charlottesville, representing her late husband, Dr. Gordon T. Whyburn.

Dr. Whyburn was Alumni Professor of Mathematics, University of Virginia, and was a member of the National Academy of Sciences. In addition, he had been President of the American Mathematical Society and Vice President of the American Association for the Advancement of Science.

DR. R. H. BING

Professor of Mathematics, The University of Texas at Austin; Member, National Academy of Sciences; Member, National Science Board.

Formerly, Rudolph E. Langer Research Professor of Mathematics, University of Wisconsin—Madison; President, Mathematical Association of America; Hedrick Lecturer, Mathematical Association of America; Vice President, American Mathematical Society; Colloquium Lecturer, American Mathematical Society; Chairman, Conference Board of Mathematical Sciences; Vice President, American Association for the Advancement of Science.

DR. RALPH KRAUSE, Program Director for Topology and Foundations, representing Dr. H. Guyford Stever, Director, National Science Foundation, Washington, D.C.

Dedication Program

Presiding

PRESIDENT STEPHEN H. SPURR
The University of Texas at Austin

Welcome and Recognitions

PRESIDENT SPURR

Introduction of the Guest Speakers

DR. LEONARD GILLMAN
Professor of Mathematics
The University of Texas at Austin

Addresses

DR. RAYMOND L. WILDER
MRS. GORDON T. WHYBURN
DR. R. H. BING

“A Message from the National Science Foundation”

DR. RALPH KRAUSE
Program Director for Topology and Foundations

Dedication of Robert Lee Moore Hall

THE HONORABLE FRANK C. ERWIN, JR.
Member, Board of Regents
The University of Texas System

Response

DR. ROBERT LEE MOORE
Professor Emeritus of Mathematics
The University of Texas at Austin

MUSIC: Members of the Longhorn Band, VINCENT R. DININO, Director

DEPARTMENT OF ASTRONOMY

Astronomy in The University of Texas became recognized as a separate department in 1958 when the University also assumed the scientific direction of the W. J. McDonald Observatory at Fort Davis, hitherto operated in collaboration with the University of Chicago. Since that time, there has been great development in the instrumental equipment available for teaching and graduate research and a diversification in the specializations of the Austin faculty and research associates. In West Texas there now exist four optical telescopes, the largest of 107 inches diameter, a millimeter wave dish and a very large radio interferometric array of advanced design and unequalled precision for the determination of radio source positions.

At Austin, there are more than 20 full-time faculty, an equal number of research associates and some 50 graduate students. Their interests range from theoretical studies of explosive nucleosynthesis and relativity to the motion of the Moon, with strong programs of planetary astronomy, infrared spectroscopy, high speed astronomy and instrument development.

ASTRONOMY FACULTY

Professors

Harlan J. Smith, Chairman
G. de Vaucouleurs
Cécile Morette DeWitt
James N. Douglas
Frank N. Edmonds, Jr.
David S. Evans
Karl G. Henize (Adjunct Professor)

Associate Professors

Roger Angel
W. David Arnett
Frank N. Bash
Wm. H. Jefferys, III
David L. Lambert
R. Edward Nather
Ralph R. Robbins

Assistant Professors

Thomas G. Barnes, III
Michel Breger
David Schramm
Myron Smith
Beatrice Tinsley
Bruce T. Ulrich
Paul Vanden Bout
Derek Wills



DEPARTMENT OF MATHEMATICS

The Department of Mathematics with a faculty of about 70 teaches some 7,000 students each semester, 95% of whom are undergraduates majoring in other subjects. Undergraduate mathematics majors have a choice between the B.A. and the more specialized B.S. For graduate students, the department offers the M.A. and the Ph.D. The graduate programs cover all important fields of mathematics and have the academic support of a faculty strong in research. Research interests of the faculty include approximation theory, numerical analysis, harmonic analysis, functional analysis, differential equations, mathematical physics, statistics, topology, algebraic geometry, and ring theory.

MATHEMATICS FACULTY

Professors Emeritus

H. V. Craig
Hyman Ettlinger
R. G. Lubben
R. L. Moore
B. Nance
E. Prouse
Milo W. Weaver

Professors

W. W. Bledsoe, Chairman
Sterling K. Berberian
R. H. Bing
John R. Cannon
E. W. Cheney
D. E. Edmondson
Clifford S. Gardner
E. Glenadine Gibb
Leonard Gillman
R. E. Greenwood
R. T. Gregory
W. T. Guy
Peter W. M. John

George Lorentz

R. C. Osborn
D. M. Young

Associate Professors

Efraim P. Armendariz
Hubert A. Berens
Simon J. Bernau
Klaus R. Bichteler
Dietrich Braess (Visiting)
Ralph Cain
L. Ray Carry
James W. Daniel
John D. Dollard
John R. Durbin
William T. Eaton
John E. Gilbert
Newcomb Greenleaf
H. Elton Lacey
Larry L. Schumaker
Galen L. Seever
Ralph E. Showalter
Erik Thomas
Dale E. Walston

Assistant Professors

John P. Alexander
Anne B. Barnes
Jia-Arng Chao
Daniel Chester
William E. Dietrich
Joe W. Fisher
Charles Friedman
Gaineford Hall
Gary C. Hamrick
James M. Hurt
Anthony Iarrobino
S. W. Joshi
Young K. Kwon
Stephen McAdam
Gordon Pledger
Ralph Gregory Pond
Michael Richter
Carl T. Russell
Martha K. Smith
Robert D. Speiser
James W. Vick
Harvey Wolff

DEPARTMENT OF PHYSICS

During the past ten years the Physics Department more than doubled in staff to its present size of 55 faculty (26 full professors, 17 associate professors, 12 assistant professors), and about 40 research scientists and postdoctoral fellows. The Department maintains active research programs in seven main areas of modern physics: Atomic and Molecular Physics, Elementary Particle Theory, Nuclear Physics, Plasma Physics, Relativity and Astrophysics, Solid State Physics, and Statistical Mechanics and Thermodynamics. These programs include theoretical as well as experimental studies, the latter ranging from one-man table top experiments to the 17 million electron volt nuclear accelerator and the Texas Tokamak (spearheading thermonuclear research). The research programs have received substantial funding from outside the University, including considerable Federal support in addition to the State appropriated Organized Research funds.

This growth has been accompanied by a concomitant increase in national standing of the Department, which now ranks between 15 and 20 in the country as a graduate research department.

PHYSICS FACULTY

<i>Professors</i>	A. W. Nolle	R. A. Matzner
F. W. de Wette, Chairman	I. Prigogine	W. D. McCormick
C. P. Boner (Emeritus)	W. W. Robertson	M. E. Oakes
A. E. Lockenvitz (Emeritus)	C. W. Scherr	P. J. Riley
J. C. Browne	A. Schild	W. C. Schieve
R. B. Bernstein	E. C. G. Sudarshan	L. C. Shepley
B. S. DeWitt	T. Tamura	S. A. A. Zaidi
W. E. Drummond	J. C. Thompson	<i>Assistant Professors</i>
L. W. Frommhold		R. D. Bengtson
J. D. Gavenda	<i>Associate Professors</i>	W. J. Braithwaite
T. A. Griffy	P. R. Antoniewicz	C. B. Chiu
C. W. Horton, Sr.	A. Böhm	C. N. Davids
E. L. Hudspeth	W. R. Coker	D. A. Dicus
E. V. Ivash	R. L. Collins	G. E. Fredericks
B. B. Kinsey	N. G. Deshpande	G. W. Hoffmann
L. Kleinman	M. Fink	D. J. Klein
R. N. Little	K. W. Gentle	L. E. Reichl
F. A. Matsen	A. M. Gleeson	J. B. Swift
W. E. Millett	F. L. Hinton	T. Udagawa
C. F. Moore	C. W. Horton, Jr.	B. T. Ulrich
Y. Ne'eman		

ROBERT LEE MOORE HALL

Robert Lee Moore Hall, located in the northeast section of the campus, at the southeast corner of the intersection of 26th Street and Speedway, is named for Professor Emeritus Robert Lee Moore, distinguished University of Texas mathematician. The building, which was first occupied in the Fall Semester of 1972-73, is constructed of warm tan brick and contains classrooms, laboratories and general offices for the Departments of Astronomy, Mathematics, and Physics.

The Project Architect was George L. Dahl, Inc., of Dallas, and the Consulting Architects were Brooks, Barr, Graeber and White of Austin. Begun in October 1968 and completed in June 1972, the building contains 368,211 gross square feet of space, and the approximate total cost was \$10,073,621. B. L. McGee Construction Company of Austin was the General Contractor, with construction cost amounting to \$8,446,191.

In addition to University of Texas Permanent University Fund bond proceeds of \$8,381,000, the University acknowledges with deep gratitude a \$1,000,000 grant from the National Science Foundation and \$692,621 provided under the Higher Education Facilities Act of 1965.

Robert Lee Moore Hall is a double-winged structure made up of a west wing of 17 levels (three below ground) and an east wing of 12 levels (two below ground). In a laboratory configuration about the size of a gymnasium in the basement (Level 1), Moore Hall houses the Texas Tokamak of the University's Center for Plasma Physics and Thermonuclear Research. The Texas Tokamak is a unique nuclear-fusion testing device combining the Russian "tokamak" plasma confinement scheme with the turbulent heating developments derived at UT Austin. The objective of the device is to test the basic concepts necessary to harness the energy-producing mechanism of the sun and the hydrogen bomb for controlled light, heat and power.

In the west wing, the Physics Department occupies the first 14 levels while the Astronomy Department is housed on levels 15 through 17. The Astronomy Department also has access to the roof above the 17th level, although the old astronomy observatory with its nine-inch telescope will remain atop the old Physics Building.

In the east wing, the Mathematics Department maintains offices and classrooms. An escalator serves the ground level and the three levels above it in the east wing.

A level-by-level summary of the building includes:

- LEVEL 1: Texas Tokamak, machine shops, storage area for 360 submarine batteries, four physics laboratories.
- LEVEL 2: Chemical laboratory, research room, X-ray room, high voltage and pump room, electron diffraction laboratory, densitometer room, dark rooms, grinding rooms, optical tunnel, mechanical rooms, offices, storage rooms, radioactive materials storage room, conference room, electron scattering laboratory, molecular beam laboratory, Möszbauer physics laboratory, properties of photons laboratory.
- LEVEL 3: Loading dock, shops, electronics storage and shop, physics laboratories, glass-blowers' shop, grinding room, shipping and receiving room, student machine shop, main machine shop, saw room, machine shop storage rooms, soldering and welding shop, offices, atomic physics laboratory.
- LEVEL 4: Entrance lobbies, escalator landing (east wing), 165-seat lecture hall and auditorium (east wing), library and reading area (west wing), main elevator landings (west wing), terrace.
- LEVEL 5: WEST WING: Physics administrative offices, conference rooms, office machine and workroom, graduate student offices, commons room, lounge area.
EAST WING: Classrooms.
- LEVEL 6: WEST WING: Return air plenum room, offices, fan room, mechanical rooms.
EAST WING: Classrooms.
- LEVEL 7: WEST WING: Offices, teaching laboratories, storage rooms, conference room, work room.
EAST WING: Classrooms.
- LEVEL 8: WEST WING: Apparatus and utility rooms, offices, 11 large undergraduate teaching laboratories.
EAST WING: Mathematics administrative offices, faculty offices, conference rooms.
- LEVEL 9: WEST WING: Offices, conference rooms, lounge, utility rooms.
EAST WING: Mechanical room, faculty offices, teaching assistant offices, conference rooms, seminar rooms.
- LEVEL 10: WEST WING: Computer ready room, dark room and laboratory, gas storage room, utility room, seminar room, offices, atomic and molecular physics laboratories.
EAST WING: Faculty offices, teaching assistant offices, conference rooms, seminar rooms.
- LEVEL 11: WEST WING: Offices, solid state plasma laboratory, plasma beam laboratory, storage room, study room, discussion room, drafting laboratory, microwave laboratory, shock wave laboratory, electronics laboratory, instrument room, plasma diffusion laboratory.
EAST WING: Faculty offices, graduate teaching assistant offices, conference rooms, seminar rooms.
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LEVEL 12: WEST WING: Offices, electronics laboratory, instrument laboratory, radio frequency laboratory, plasma laboratory spectroscopy, contract plasma laboratory, plasma diagnostic laboratory, dark room, plasma arc laboratory, plasma waves laboratory, gaseous electronics laboratory, storage rooms.

EAST WING: Faculty lounge, faculty offices, graduate teaching assistant offices, conference rooms, seminar rooms.

LEVEL 13: WEST WING: Conference rooms, staff offices, graduate student offices, low temperature magnet laboratories, materials preparation laboratory, X-ray laboratory, dark room, work shop, drafting and data room.

EAST WING: Faculty and teaching assistant offices, conference rooms.

LEVEL 14: WEST WING: Solid state physics laboratories, seminar room, faculty offices, graduate student offices.

LEVEL 15: WEST WING: Astronomy administrative offices, graduate seminar rooms, graduate student offices, faculty offices, staff offices, J.M. Peridier Library, photographic plate storage rooms, micro-densitometer rooms, computer complex (key-punches, teletypes, Respond terminal and data card storage area), engineering offices, xerox duplicating room.

LEVEL 16: WEST WING: Faculty, staff and graduate student offices, photographic laboratories (chemical mixing room, photo-copy room, negative and positive dark rooms), instrument laboratories, radio-frequency interference shielded room, student optical room, student electronic shop, student instrument shop, conference room.

LEVEL 17: WEST WING: Faculty, staff and graduate student offices, instrument laboratories, electronics laboratories, instrument shop, radio frequency interference shielded rooms, photographic darkrooms, conference rooms, radio astronomy data analysis laboratory.

WEST WING ROOF: Astronomy storage rooms, platform area for astronomy experiments.





photography by FRANK ARMSTRONG



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