

## Curriculum Vitae

### Marcos Moshinsky

#### Estudios:

Licenciatura en Física  
Universidad Nacional Autónoma de México, 1944.  
Maestría en Física  
Princeton University, 1947.  
Doctorado en Física  
Princeton University, 1949.

Investigador Titular en el Instituto de Física de la Universidad Nacional Autónoma de México, donde ha estado laborando desde 1942, siendo Jefe del Departamento de Física Teórica de 1968-1974. Ha dirigido también un grupo de el Instituto Nacional de Energía Nuclear (INEN), desde 1960 hasta 1984 y es miembro de El Colegio Nacional desde 1972. Fundador de la Escuela Latinoamericana de Física (ELAF) en 1959 y organizador de sus sesiones en México en 1959, 1962, 1965, 1968 y 1971, así como Profesor de la misma en 1974, 1977, 1980, 1983, 1986, 1989, 1992, 1995 y 1998.

#### Distinciones Académicas

Premio de la Academia de la Investigación Científica 1961,  
Premio Elía Sourasky, 1966,  
Premio Nacional de Ciencias 1968,  
Premio Luis Elizondo, 1971,  
Premio UNAM, Investigación en Ciencias Exactas 1985,  
Premio Príncipe de Asturias, Oviedo, España, 1988,  
Presidente de la Academia de la Investigación Científica 1962-1963,  
Presidente de la Sociedad Mexicana de Física 1967-1969,  
Premio Interamericano de Ciencias “Bernardo A. Houssay” (OEA) Washington, DC 1990.  
Editor, Revista Mexicana de Física 1952-1967,  
Editor Asociado, Nuclear Physics 1958-1965,  
Editor Asociado, Physics Letters 1965-1972,  
Editor Asociado, Journal of Mathematical Physics 1971-1973,  
Andrei Sakharov Medal for Human Rights USSR, 1991.  
Medalla al Mérito Académico de la Sociedad Mexicana de Física  
Medalla de Oro con su nombre, que se otorga anualmente, a partir de 1993.  
Doctor Honoris Causa UNAM 1996.  
Premio de Investigación en Ciencias de la UNESCO, París, Francia 1997.  
Juchiman de Plata, otorgado por la Sociedad del mismo nombre. Villahermosa, Tab. 1997.  
Nivel III del Sistema Nacional de Investigadores.  
Medalla Wigner otorgada en el Congreso de Teoría de Grupos y sus Aplicaciones Julio 14, de 1998, en Hobart, Australia.  
Doctor Honoris Causa, Goethe University, Frankfurt, Germany July 2000  
Investigador Nacional de Excelencia Sistema Nacional de Investigadores (2003).  
Premio Weizmann en Ciencia y Humanidades, Instituto Weizmann Israel, 2003  
Medalla al Mérito Universitario “Justo Sierra”. UNAM Mayo 2005.

## **Investigador o Profesor invitado por un semestre en:**

Instituto Henri Poincaré (1954),  
Universidad de Princeton (1959-1960),  
State University of New York at Stony Brook (1967-1968),  
Universidad de Montreal (1973 y 1977),

Conferencista invitado en más de 200 universidades y centros de investigación en Estados Unidos, Canadá, casi toda Europa (Este y Oeste), Latino América, así como Israel, India, Pakistán, China, Japón, Australia y Africa del Sur. Participante en más de 100 conferencias nacionales e internacionales.

Ha publicado más de 250 artículos periodísticos sobre ciencia, educación y su impacto social.

## **Miembro de:**

Sociedad Mexicana de Física  
American Physical Society  
Academia de la Investigación Científica (actualmente Academia Mexicana de Ciencias  
Academia Brasileira de Ciencia  
Academia Europea de Ciencias, Artes y Letras  
Academia Pontificia de Ciencias  
Academia de Ciencias de América Latina  
Academia de Ciencia del Tercer Mundo  
American Academy of Arts and Science  
Academia Nacional de Ciencias Exactas, Físicas y Naturales de Argentina.

Ha dirigido las tesis doctorales de 14 estudiantes graduados y el mismo número de post-doctorados de todas partes del mundo.

También ha dirigido cerca de 34 tesis para el grado de físico.

Ha impartido en cada semestre en la Facultad de Ciencias-UNAM, el curso sobre Mecánica Cuántica, así como cursos a nivel de graduado sobre diferentes temas de física matemática y nuclear.

Sus publicaciones científicas en el campo de la Física Nuclear, Teórica, Física Matemática y otros campos, incluye a 5 libros y cerca de 280 artículos de investigación.

## Libros

- 1 “Tables of Transformation Brackets” with T. A. Brody, (Gordon & Breach 1969).
- 2 “Group Theory and the Many Body Problem” (Gordon & Breach 1967).
- 3 “The Harmonic Oscillator in Modern Physics: From Atoms to Quarks” (Gordon & Breach 1969). Russian Translation (MIR 1972).
- 4 “Many Body Problems and Related Problems of Theoretical Physics”. Editors M. Moshinsky T. A. Brody and G. Jacob. (Gordon & Breach 1967).
- 5 “The harmonic oscillator in modern physics”, en colaboración con Yu. F. Smirnov. Tiene 412 páginas. (Hardwood Academic Publishers, The Netherlands 1996).

## Publicaciones en Honor de MM y algunas contribuciones no científicas

- 1 Proceedings del Simposium Internacional de Teoría de Grupos de la American Institute of Physics en honor del Prof. Marcos Moshinsky por el 70 aniversario y 50 años en el Instituto de Física, Cocoyoc Mor. 400 pgs. Editors A. Frank y K. B. Wolf Symmetries in Physics (Springer-Verlag 1992).
- 2 Proceedings del Simposium Internacional de Teoría de Grupos de la American Institute of Physics en honor del Prof. Marcos Moshinsky por el 70 aniversario y 50 años en el Instituto de Física, Cocoyoc Mor. 266 pgs. Editors A. Frank, T.H.Seligman y K. B. Wolf (Springer-Verlag 1992).
- 3 Reflexiones sobre educación, Ciencia y Sociedad. Marcos Moshinsky (1970-1976) Vol. I El Colegio Nacional 639 pgs. (1995).
- 4 Reflexiones sobre educación, Ciencia y Sociedad. Marcos Moshinsky (1976-2000) Vol. II El Colegio Nacional 389 pgs.(2000).
- 5 Testimonios: Marcos Moshinsky, ochenta años de vida y 60 años de trabajo científico. Editores Alejandro Frank y Kurt Bernardo Wolf. 185 pgs. Coordinación de la Investigación Científica-UNAM (2001).
- 6 Forjadores de la Ciencia en la UNAM. Conferencias del ciclo ”Mi vida en la ciencia”. Marcos Moshinsky pgs 14-32. ”Semblanza del Dr. Marcos Moshinsky”. Alejandro Frank pgs. 33-36. Coordinación de la Investigación Científica-UNAM (2003).

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- [3] Vibración de una membrana circular de dos densidades. *Rev. Ing. Hid.* **3**, 5 (1949).
- [4] Interference phenomena for particles obeying Bose or Fermi statistics. *Proc. A. Phil. Soc.* **94**, 53 (1950).
- [5] Interactions of Birkhoff's gravitational field with the electromagnetic and pair fields. *Phys. Rev.* **80**, **514**, (1950).
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- [8] Boundary conditions and time dependent states. *Phys. Rev.* **84**, 525 (1951).
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- [19] Vibraciones térmicas de los cristales y la difracción de neutrones. *Rev. Mex. Fís.* **3**, 1 (1954).
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