

*MG X MM*

*MARCEL GROSSMANN AWARDS*

*RIO DE JANIERO 2003*

*ICRA*

*International Center for Relativistic Astrophysics*

*MG X MM*

*MARCEL GROSSMANN AWARDS*

*RIO DE JANIERO 2003*

*and*

*TEST*

*ICRA*

*International Center for Relativistic Astrophysics*

Cesar Lattes and José Leite Lopez;  
Liete Lopez and Jayme Tiomno

**10th Marcel Grossmann Meeting**  
**July 2003, Rio de Janeiro**

*Institutional Award*

**CBPF (Brazilian Center for Research in Physics)**

for its role as a teaching and research institution and as a place originating fundamental physics ideas in the exploration of the universe

—presented to its founders Cesar Lattes, José Leite Lopez and Jayme Tiomno

*Individual Awards*

**YVONNE CHOQUET-BRUHAT**

and

**JAMES W. YORK, JR.**

for separate as well as joint work in establishing the mathematical framework for proving the existence and uniqueness of solutions to Einstein's gravitational field equations.

**YUVAL NE'EMAN**

for his contributions to science, epistemology, mathematics and physics from subnuclear to space sciences.

Each recipient is presented with a silver casting of the TEST sculpture by the artist A. Pierelli. The original casting was presented to His Holiness Pope John Paul II on the first occasion of the Marcel Grossmann Awards.

From the CBPF archives:  
Cesar Lattes at Chacaltaya Cosmic Physics Laboratory,  
Feynmann in Rio.

**9th Marcel Grossmann Meeting  
July 2000, Rome**

*Institutional Award*

**SOLVAY INSTITUTES**

for identifying and recording in discussions by the protagonists the crucial developments of physics and astrophysics in the twentieth century  
—presented to Jacques Solvay.

*Individual Awards*

**CECILLE AND BRYCE DEWITT**

for promoting General Relativity and Mathematics research and inventing the “summer school” concept.

**RICCARDO GIACCONI**

for opening, five successive times, new highways for exploring the Universe.

**ROGER PENROSE**

for extending the mathematical and geometrical foundations of General Relativity.

**8th Marcel Grossmann Meeting  
June 1997, Jerusalem**

*Institutional Award*

**Hebrew University**

for its role as a cradle of Science and Humanities and for hosting the manuscripts of Albert Einstein.  
— presented to M. Magidor, President of the Hebrew University of Jerusalem

*Individual Awards*

**TULLIO REGGE**

for his contributions to the interface between mathematics and physics leading to new fields of research of paramount importance in relativistic astrophysics and particle physics.

**FRANCIS EVERITT**

for leading the development of extremely precise space experiments utilizing superconducting technology to test General Relativity and the Equivalence Principle.

Yvonne Choquet-Bruhat and James W. York, Jr.

**7th Marcel Grossmann Meeting  
June 1994, Stanford, USA**

*Institutional Award*

**Space Telescope Science Institute**

for its critical role in the direction and operation of the Hubble Space Telescope, a truly unique international laboratory for the investigation and testing of general relativity in the context of modern astrophysics and cosmology.

— presented to Peter Stockman

*Individual Awards*

**SUBRAHMANYAN CHANDRASEKHAR**

for his contributions to the analysis of gravitational phenomena from Newton to Einstein and especially for leading the way to relativistic astrophysics with the concept of critical mass for gravitational collapse.

**JIM WILSON**

for having built on his experience in nuclear physics, thermonuclear reactions, and extensive numerical simulation to create a new testing ground for the novel concepts of relativistic astrophysics.

**6th Marcel Grossmann Meeting  
June 1991, Kyoto, Japan**

*Institutional Award*

**RITP**

for keeping alive first in Hiroshima and then in Kyoto research in relativity, cosmology, and relativistic field theory and the development of a school of international acclaim

— presented to Professor K. Tomita.

*Individual Awards*

**MINORU ODA**

for participating in the pioneering work of the early sixties in X-ray astronomy and for his subsequent molding of an agile and diversified Japanese scientific space program investigating the deepest aspects of relativistic astrophysics.

**STEPHEN HAWKING**

for his contributions to the understanding of spacetime singularities and of the large scale structure of the Universe and of its quantum origins.



Yuval Ne'eman

**5th Marcel Grossmann Meeting  
August 1988, Perth, Australia**

*Institutional Award*

**THE UNIVERSITY OF WESTERN AUSTRALIA**

for its contributions to relativistic astrophysics — presented to the Vice Chancellor, Professor Robert Smith.

*Individual Awards*

**SATIO HAYAKAWA**

for his contributions to research in gamma, X-ray and infrared radiation as well as cosmic rays.

**JOHN ARCHIBALD WHEELER**

for his contributions to geometrodynamics and Einstein's visions.

**4th Marcel Grossmann Meeting  
1985, Rome, Italy**

*Institutional Award*

**THE VATICAN OBSERVATORY**

for its contributions to the origin and development of astrophysics — presented to His Holiness Pope John Paul II.

*Individual Awards*

**WILLIAM FAIRBANK**

for his work in gravitation and low temperature physics.

**ABDUS SALAM**

for his work in unifying fundamental interactions.

Jayme Tiomno, John Wheeler, Remo Ruffini (Princeton, 2002)

*TEST*