

# Ceremony of the Francqui Prize by His Majesty The King Albert II at the "Fondation Universitaire" on June 28, 2000

# Report of the Jury



Marc Henneaux

# Report of the Jury (April 29, 2000)

It has been proposed that the Francqui-Prize for the year 2000 be awarded to Professor Marc HENNEAUX for his outstanding contributions to our understanding of the fundamental forces in Nature. His work represents the marriage of hitherto uncommon concepts in physics and contemporary developments in mathematics and helps to pave the way to an unified view of natural laws, including the reconciliation of gravitation and quantum physics.

Professor HENNEAUX anticipated by more than ten years the anti de Sitter – conformal Field Theory correspondence, which is a crucial step towards understanding the challenge posed by incorporating Einstein's General Relativity into quantum mechanics. This leads among other things to an understanding of how black holes radiate without the loss of information. In his work he has also produced a very elegant reformulation of the work for which G. 't HOOFT and M. VELTMAN were awarded the 1999 Nobel Prize in physics which sheds new light on the applicability of gauge field theory to describe the elementary particles.

Jury members:

Professor Dr. Massimo. MAREZIO SCENET European Network for Superconductivity MASPEC-CNR Institute and

#### **Professor C.A. BATES**

Dean of science School of Physics & Astronomy Nottingham - UK

#### **Professor Lars BRINK**

Institute of Theoretical Physics Chalmers University of Technology Göteborg - Sweden

# **Professor Predrag CVITANOVIC**

Niels Bohr Institute Copenhagen - Denmark

#### Professor Dr. P.J.G.M. de WIT

Laboratory of Phytopathology Wageningen University The Netherlands

#### **Professor Mildred S. DRESSELHAUS**

Institute Professor of Electrical Engineering and Physics - MIT Cambridge, Massachusetts - USA

# **Professor W. GELLETLY**

Head of School of Physics and Chemistry University of Surrey Surrey - UK

#### **Professor Michael HALL**

Biozentrum University of Basel Department of Biochemistry Basel - Switzerland

# **Professor Yngve OHRN**

Professor of Chemistry and Physics University of Florida QTP-An Institute for Theory and Computation in Molecular and Materials Sciences Gainesville, Florida - USA

# Professor E.P.J. van den HEUVEL

Director

Astronomical Institute « Anton Pannekoek » and Center for High Energy Astrophysics University of Amsterdam Amsterdam - The Netherlands

#### Professor R. VILLAR

Rector of Universidad Autonoma de Madrid Spain

#### Professor P. WYDER

Max-Planck Institut für Festkörperforschung Hochfeld-Magnetlabor-MPI-CNRS Grenoble - France