

**Remembering**  
**Giordano Diambrini Palazzi**  
(1926 - 2012)

Editors  
B. Borgia and A. Di Domenico

Sapienza Università di Roma, Dipartimento di Fisica  
Istituto Nazionale di Fisica Nucleare, Laboratori Nazionali di Frascati  
Istituto Nazionale di Fisica Nucleare, Sezione di Roma

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Front cover photo:

Giordano Diambrini Palazzi at the CERN SPS West Area, WA-34 experiment, April 1977  
(Courtesy of CERN Audiovisual Media Services)

Back cover photo:

Magnetic field measurements at the Frascati synchrotron;  
from left to right: Guido Di Stefano, Gianpaolo Murtas, Giordano Diambrini Palazzi,  
Gianfranco Bologna, Giancarlo Sacerdoti, Mario Spina, November 1957  
(Courtesy of INFN LNF-SIS)

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## Preface

As a tribute in memory of Giordano Diambrini Palazzi, we organized a commemorative event which took place on October 24th, 2012 at the Physics Department of Sapienza University of Rome.

On behalf of the Organizing committee we would like to thank all the invited speakers for their significant contributions, providing a full vivid image of both Diambrini's personality and scientific achievements.

Special thanks to Giorgio Salvini, for his remarkable and moving introduction, and to Raffaello Diambrini Palazzi for having shared with us a part of his family life.

We wish to thank all participants in the event, and in particular Luciano Mairani, Fernando Ferroni, Umberto Dosselli, Marcella Diemoz, Egidio Longo, Giancarlo Ruocco.

We also would like to thank Mauro Mancini of the INFN Rome staff for his support in the event organization.

After the commemoration, it clearly emerged the necessity to collect the contents of the talks in a written contribution form.

Therefore we decided to collect all papers in the present volume, adding other contributions from Giordano's colleagues and son Alessandro who didn't have the opportunity to participate in the event. We warmly thank them all for the efforts in making this publication possible.

Bruno Borgia  
Antonio Di Domenico



## Foreword

Giordano Diambrini Palazzi was one of the founders of the Frascati Laboratories of INFN, the Italian Institute for Nuclear Research. The Frascati synchrotron was built in the record time of four years by a group of young physicists and engineers led by Giorgio Salvini. Among them, including Salvini himself, there was no expert on accelerators. This was during the 50's, at the dawn of the economic boom. Diambrini, while significantly contributing to the construction of the electron synchrotron, the third in the world and with the highest intensity, together with Guido Barbiellini, Gianfranco Bologna and Gianpaolo Murtas, realized the first beam of monochromatic and polarized photons produced in the collision of the electron beam by means of a single diamond crystal. This result had an extraordinary global resonance and the method was soon adopted in other laboratories, as DESY and Cornell.

There is no doubt that the consideration that INFN gained in those years was also due to the success of the Frascati laboratory and to the discovery of Diambrini and collaborators. Consideration and prestige that have grown over the years to the present days, building the INFN success on solid foundations.

Fernando Ferroni (President of INFN)  
Umberto Dosselli (Director of INFN Frascati Labs.)  
Marcella Diemoz (Director of INFN Rome unit)  
Egidio Longo (Director of Physics Dept., Sapienza Univ. Rome)  
Bruno Borgia (Sapienza Univ. Rome)  
Antonio Di Domenico (Sapienza Univ. Rome)



# In ricordo di Giordano Diambrini Palazzi (1926-2012)

Physics Department, Sapienza University of Rome, Italy  
24 October 2012

## Opening

Giancarlo Ruocco	(Director of Physics Dept., Sapienza)
Fernando Ferroni	(President of INFN)

## Speakers

Guido Barbiellini	University of Trieste
Sergio Petrerà	University of L'Aquila
Paolo Gauzzi	Sapienza University of Rome
Raffaello Diambrini Palazzi	
Luciano Maiani	Sapienza University of Rome

## Organizing Committee

Bruno Borgia  
Marcella Diemoz  
Umberto Dosselli  
Luciano Maiani  
Giancarlo Ruocco

## Secretariat

Mauro Mancini

**web site:** <http://www.roma1.infn.it/diambrini-palazzi/>





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