

Photon Correlation and Light Beating Spectroscopy

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Photon Correlation and Light Beating Spectroscopy

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PREFACE

This volume contains the invited lectures and seminars and abstracts of the contributed seminars presented at the NATO Advanced Study Institute on Photon Correlation and Light Beating Spectroscopy held at the Centro Caprense Di Vita E Di Studi Ignazio Cerio , Capri, Italy, July 16-27, 1973.

The Institute was organized to provide a comprehensive presentation of this new and rapidly developing field for those interested in applying these techniques to problems in many areas including Physics, Biology, Engineering and Chemistry. The lectures were divided into three principal categories: the first Basic Theory (Photon Statistics and Correlation, Scattering Theory), secondly Instrumentation (Correlation Techniques, Light Beating), and the third Areas of Application (Gas and Liquid Dynamics, Critical Phenomena, Biology). The seminars provided detailed presentations of applications to a number of specific problems.

Although the selection of topics was inevitably limited, it was the hope of the organizing committee that the lectures would provide a broad coverage appropriate for the needs of the interdisciplinary audience represented by the participants, and that this volume would serve for some years to come as a useful introduction for those entering the field.

The members of the Organizing Committee were:

E.R. Pike, RRE, Malvern U.K.	}	Co-directors
H.Z. Cummins, New York University		
M. Bertolotti, Universita di Roma	-	Local Organizer
J.M. Vaughan, RRE, Malvern, U.K.		Secretary
H. Swinney, New York University		Treasurer
P. Lallemand, Ecole Normale Superieure, Paris		
H. Haken, Universitat Stuttgart, Germany.		

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The National Science Foundation
The Science Research Council
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The Saicor-Honeywell Company and
Messrs Ealing Beck

We wish to thank Professor Mario Bertolotti whose efforts as local organizer contributed enormously to the success of the Institute, and also to thank Dr Michael Vaughan and Professor Harry Swinney for their extensive efforts as Secretary and Treasurer. Finally, we wish to express our particular gratitude to Donna Laetitia Cerio Holt, President of the Centro Caprense I.C. for making the facilities of the Centro available to this Institute.

HZC (New York)
ERP (Malvern)

October, 1973

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