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Malgorzata Kujawska
Oleg V. Angelsky
Editors

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A. Negrich (Ukraine)
L. Podkamen (Ukraine)
P. Polyanskii (Ukraine)
A. Prydii (Ukraine)
Yu. Tomka (Ukraine)
Yu. Ushenko (Ukraine)
S. Yermolenko (Ukraine)
T. Venkel (Ukraine)
Ju. Viktorovskaya (Ukraine)
K. Zenkova (Ukraine)
Yu. Galushko (Ukraine)

Session Chairs

Plenary Session

M. Kujwinska (Poland)

S. Hanson (Denmark)

- 1 Informative Content of Statistical Optical Fields,
Including Optical Chaos and Singular Optics
Ichirou Yamaguchi (Japan)
M. S. Soskin (Ukraine)
Yu. Kivshar (Australia)
F. Goudail (France)
- 2 Optical Correlation Diagnostics, Interferometry, and
Microscopy of Rough Surfaces and Random Media
Mitsuo Takeda (Japan)
O. Angelsky (Ukraine)
P. Tomanek (Czech Republic)
- 3 Optical Correlation Devices Based on Diffractive Optical
Elements, Including Optical and Digital Holography,
Fractal Optics, and Optical Sensors
M. Dennis (United Kingdom)
I. Mokhun (Ukraine)
- 4 New Applications of Correlation Optics in Biology and Medicine
A. Dieterlen (France)

Introduction

The Eighth International Conference on Correlation Optics continues the series of conferences with the same title held biannually since 1993 at Chernivtsi National University (Ukraine). More than 80 participants from 18 countries attended the conference, and more than 140 reports were presented.

This volume includes the invited talks as well as the best oral and poster contributions on the following topics:

1. Informative content of statistical optical fields, including optical chaos and singular optics;
2. Optical correlation diagnostics, interferometry and microscopy of rough surfaces and random media;
3. Optical correlation devices on diffractive optical elements, including optical and digital holography, fractal optics and optical sensors; and
4. New applications of correlation optics in biology and medicine.

We are grateful to all participants of the conference, as well as to the members of the International Program Committee and the Conference Organizing Committee, whose work provided the high scientific and organizing level of the conference.

**Malgorzata Kujawska
Oleg V. Angelsky**

