

**Communications of the
Bexbach Colloquium on Science 2000**

Third Volume

Editors

MARKO ROBNIK

ANDREAS RUFFING

May 2003

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Marko Robnik, Andreas Ruffing (eds.)

**Communications of the Bexbach Colloquium
on Science 2000**

Third Volume

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Foreword

The editors of this issue, Marko Robnik and Andreas Ruffing, like to express their sincere thanks to the mayor of the town Bexbach, Heinz Müller, to the local assembly of representatives and to the governor of the Saarpfalz district, Clemens Lindemann.

Their support and their great attitude towards innovations in the sciences created the prerequisites for establishing the conference

Bexbach Colloquium on Sciences

BCS 2000

which was held in Bexbach, Saarland, from 27 October 2000 to 29 October 2000

Vorwort

Die Herausgeber dieser Reihe, Marko Robnik und Andreas Ruffing, möchten sich herzlich beim Bürgermeister der Stadt Bexbach, Heinz Müller, beim Rat der Stadt Bexbach und beim Landrat des Saarpfalz-Kreises, Clemens Lindemann, bedanken.

Ihre Unterstützung und ihre aufgeschlossene Haltung gegenüber den modernen Wissenschaften ermöglichten die Veranstaltung der Konferenz

Bexbach Colloquium on Sciences

BCS 2000

die in Bexbach, Saarland, vom 27. bis 29. Oktober 2000 stattfand.

European Advanced Studies Conferences

The conference BCS 2000 in Bexbach was the first event of the following newly conceived series of European Advanced Studies Conferences:

EAS Conference 2000	Bexbach, Germany
EAS Conference 2001	Otočec, Slovenia
EAS Conference 2002	Trakošćan, Croatia
EAS Conference 2003	Novacella, Italy
EAS Conference 2004	Meteora, Greece
EAS Conference 2005	Praha, Czech Republic
EAS Conference 2006	Brunnen, Switzerland
EAS Conference 2007	Riquewihr, France
EAS Conference 2008	Mondorf-les-Bains, Luxembourg
EAS Conference 2009	Torun, Poland
EAS Conference 2010	Sankt-Petersburg, Russia

Marko Robnik Andreas Ruffing

PART 1

Yoji Aizawa:

**Several Comments on the Complexity and the
Unbroken Wholeness in Non-linear Dynamical Systems**

PART 2

Mirjam Cvetič:

Domain Wall World(s) in Fundamental Theory

PART 3

Halina Grushevskaya:

**Spin Polarization Corrections in Relativistic
Scattering Theory of Leaky Packed Solids**

PART 4

Cornelia Kober:

Composite Material with Shape Memory Alloy Filters

PART 5

George Krylov:

**On Solvable Potentials for One Dimensional
Schrödinger and Diffusion Equations**

PART 6

Rufat Mir-Kasimov:

Space Quantization and Relativistic Dynamics

PART 7

Volker Ostheimer:

**Perturbed $\gamma\gamma$ -Angular Correlation Spectroscopy
in II-VI Superconductors**