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Miguel Rubí
Conrado Pérez-Vicente (Eds.)

Complex Behaviour of Glassy Systems

Proceedings of the XIV Sitges Conference
Sitges, Barcelona, Spain, 10–14 June 1996



Springer

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Cataloging-in-Publication Data applied for.

Die Deutsche Bibliothek - CIP-Einheitsaufnahme

Complex behaviour of glassy systems : proceedings of the XIV Sitges Conference, Sitges, Barcelona, Spain, 10 - 14 June 1996 / José Miguel Rubí ; Conrado Pérez-Vicente (ed.). - Berlin ; Heidelberg ; New York ; Barcelona ; Budapest ; Hong Kong ; London ; Milan ; Paris ; Tokyo : Springer, 1997
(Lecture notes in physics ; Vol. 492)
ISBN 3-540-63069-4

ISSN 0075-8450

ISBN 3-540-63069-4 Springer-Verlag Berlin Heidelberg New York

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Printed in Germany

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Typesetting: Camera-ready by the authors

Cover design: *design & production* GmbH, Heidelberg

SPIN: 10550798 55/3144-543210 - Printed on acid-free paper

Preface

There has been pronounced historical interest in the study of glassy systems as well as a considerable amount of experimental data and industrial applications collected during the last years. Nowadays, these systems constitute one of the most interesting fields of condensed matter physics. Although its understanding is of high potential interest from theoretical and applied points of view and much progress has been achieved during recent years, the essentials of the underlying physical mechanisms are still not understood. The present theoretical approaches to glassy systems are based on similar techniques. This fact allows for a common language and the existence of unified background. In all of these systems, frustration, i.e., competition between interactions of different signs, play a crucial role. This generates the appearance of strong complex dynamical behaviour under variation of some external parameters such as temperature or magnetic field. Systems exhibiting glassy behaviour include for example: structural glasses, spin glasses, vortex glasses, Josephson junction arrays, and protein folding. Based on the interest in establishing a forum to unify the present ideas about the subject and to debate new perspectives, we organized the XIV Sitges Conference. We wish to express our gratitude to all the speakers and participants who certainly contributed to create a high scientific level and a very pleasant atmosphere.

The conference was sponsored by CEE (Euroconference) and by institutions who generously provided financial support: DGICYT of the Spanish Government, CIRIT of the Generalitat of Catalunya, University of Barcelona, CSIC, and “La Caixa”. The city of Sitges allowed us, as usual, to use the Palau Maricel as the lecture hall.

Finally, we are also very grateful to all those who collaborated in the organization, Drs. F. Ritort, A. Pérez, I. Pagonabarraga, C. Miguel, R. Pastor, J.M. Vilar, and A. Corral as well as to Profs. J. Bermejo, J. Brey, J. Marro, and M. San Miguel.

Barcelona, April 1997

The Editors

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