

# Lecture Notes in Physics

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## The Physical Universe: The Interface Between Cosmology, Astrophysics and Particle Physics

Proceedings of the XII Autumn School of Physics  
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## PREFACE

The XII Autumn School of Physics "The Physical Universe: The Interface between Cosmology, Astrophysics and Particle Physics" was held in Lisbon, 1-5 October 1990.

As the title suggests, the school was dedicated to the interface between cosmology, astrophysics and particle physics, an exciting area of research at present developing rapidly, and one of its main purposes was to put young physicists and postgraduate students in contact with these new subjects. To achieve this, the school was organized around introductory courses, complemented by more specialized seminars, and was fortunate to count among its lecturers some of the most active scientists in the field, whom we would like to thank for their invaluable contribution.

We acknowledge and thank the financial support given to the organization by INIC, JNICT, GTAE and the British Council, as well as the help of the Banco Português do Atlântico, Nestlé Portugal, Região de Turismo do Oeste and Óbidos Town Hall. We also thank the Reitoria da Universidade de Lisboa, where the School took place, for permission to use their premises.

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Finally, we are very grateful to Springer-Verlag for publishing this volume.

Lisbon, April 1991

The Editors  
J. D. Barrow  
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