

FOREWORD

A small group of people, mostly working in Rio de Janeiro and São Paulo, organized in 1990 the first Workshop on Hadron Interactions (RETINHA I) at the Institute of Physics of the University of São Paulo (USP), with the purpose of forming a permanent research group on hadron physics in Brazil. We have continuously been collaborating since then, in the investigation of several aspects of hadron physics, such as effective field theories, non-perturbative methods in QCD, models of hadrons, models for elastic, inelastic and diffractive collisions of hadrons, production and suppression of strangeness and charm in hadronic matter, transport phenomena including relativistic hydrodynamics, with applications to heavy-ion collisions, identical-particle interferometry, etc. and more recently also in lattice simulations of QCD.

In this issue of the *Brazilian Journal of Physics*, we present surveys on some of these topics, with emphasis on our original contributions. They are not complete reviews of the respective subjects, but rather our views on these topics. We hope that similar surveys will be presented, in the near future, on other results that we have obtained.

In the past 15 years, many nice workshops of our working group have been held at USP (Universidade de São Paulo), CBPF (Centro Brasileiro de Pesquisas Físicas), IFT/UNESP (Instituto de Física Teórica – Universidade Estadual Paulista), UERJ (Universidade Estadual do Rio de Janeiro) and Universidade Presbiteriana Mackenzie. The proceedings of RETINHA XV have been published in volume 34, 1A, of the *Braz. J. Phys.*, in 2004. Many of the results reported in the present surveys have been discussed in these encounters. Other results are consequences of research work initiated in exchanges during these meetings. All of these meetings were very effective in promoting active research work in this field in Brazil, and especially in encouraging the young generation. We would like to express our gratitude for the hospitality and support received in several institutions. Also, we thank the members of the working group and participants of RETINHA's, who contributed to enrich our achievements.

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