The desire of knowledge is first stimulated in us
when remarkable phenomena attract our attention
J.W. von Goethe, Farbenlehre, 1810 – Introduction
translated by C.L. Eastlake, London, 1840
The sciences depend much more on experiment than art,
and for mere experiment many a votary is qualified.
Scientific results are arrived at by many means and
cannot dispense with many hands, many heads.
ibidem – Concluding observations

PREFACE

Recent evidence for an atmospheric neutrino anomaly pointing towards neutrino oscillations is consolidating with the increase of exposure time and statistics and has been one of the most exciting topics in the field of elementary particles physics since more than a year. The lack of neutrinos from the sun is being confirmed by several different experiments hinting again at oscillations. These well established anomalies are to be confronted with high-energy accelerator data, which at the moment provide more and more stringent tests of the Standard Model and very scarse, if any, hints of new physics. The 6th Topical Seminar on Neutrino and Astroparticle Physics was held in San Miniato (Pisa) from 17 to 21 May 1999 at the Conference Centre "I Cappuccini" of the Cassa di Risparmio di San Miniato. The conference started with a session on the scientific exploration of space, underlining the attention recently paid to space by the particle physics community. The rest of the conference was devoted to presentations covering the latest results, projects, and theoretical interpretations of neutrino physics and astrophysics, low- and high-energy cosmic rays, γ-ray bursts, new particle searches, with and without accelerators, and gravitational waves. The conference programme comprised about 70 talks. The meeting was attended by more than 80 physicists, representing 45 laboratories, and coming from 13 different countries.

The Seminar was sponsored and supported by the Italian Institute for Nuclear Physics (INFN), the Universities of Bologna and Florence, the Italian Physical Society (SIF), the Regione Toscana, the Cassa di Risparmio di San Miniato (CRSM), and the Electronics and Instrumentation Firm CAEN. We would like to thank the sponsoring institutions who rendered the meeting possible and in particular Prof. E. Iarocci, President of the INFN, Prof. A. Forino, Director of the Physics Department of the University of Bologna, Prof. F. Roversi-Monaco, Rector of the University of Bologna, Prof. F. Barocchi, Director of the Physics Department of the University of Florence, Prof. P. Blasi, Rector of the University of Florence, Mr. V. Chiti, President of the Regione Toscana, and Avv. C. Franci, President of the Cassa di Risparmio di San Miniato. We would like to thank most warmly the secretaries of the meeting and all those who helped us with its organization, and during the conference, Ms. M. Boldini, Ms. S. Cappelli and Mr. S. Zagato. We would also like to thank all the speakers for the quality of their contributions and all the participants for their enthusiasm which greatly contributed to the scientific success of the meeting.

Those attending the meeting were greatly saddened by the news of the sudden and unexpected death of Bianca Monteleoni Conforto on 18 May. Bianca was an active member of the astroparticle physics community and leader of the Florence team which participates in the planning of the Nestor experiment deep in the Mediterranean Sea. Her professional competence and human qualities will be sorely missed in our field. We would like to dedicate this volume to her memory.

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Editors