PREFACE

We call the readers attention to papers that were presented at the 29th Apatity Seminar "Physics of Auroroal Phenomena". The seminar was held on 27 February – 3 March 2006 in the Polar Geophysical Institute of the Kola Science Center of the Russian Academy of Sciences. The seminar collected about 100 participants including some 50 ones from other Russian cities and 9 attendees from abroad. About 140 reports (both oral and poster) were presented and about half of them were submitted for the proceedings. The regular program of the 29th seminar included, as usual, discussions of the rather wide circle of phenomena. Correspondingly, the papers are divided into following sections: *Geomagnetic storms and substorms* (12 papers), *Fields and particles in the magnetosphere* (12 papers), *Waves and wave-particle interaction* (12 papers), *The Sun, solar wind, cosmic rays* (10 papers), *Ionosphere and upper atmosphere* (12 papers), *Low atmosphere and ozone* (6 papers), *Heliobiosphere* (5 papers).

We would like to express our gratitude to the PGI administration for significant help in organization of the seminar. The financial support came from the Russian Foundation for Basic Research. In particular, more than 20 participants could use the RFBR support to attend the seminar.

For the first time in the long years the seminar was held without its permanent chairman Yuri Pavlovich Maltsev who tragically died in June 2005. The 29th seminar was devoted to his memory. There was a special session where several lectures were given by I.I. Alexeev, A.E. Levitin, A.A. Namgaladze, A.A. Petrukovich, S.V. Polyakov, Ya.I. Feldstein, and H. Lichtenegger, who described various aspects of the scientific activity of Yuri Maltsev and his contribution to the development of the space physics and geophysics in Russia and in the world. Some of these presentations are also included in these proceedings.

In 2006 it is 100 years since the birth of Sergey Ivanovich Isayev who was one of the founders and the first Director of the Polar Geophysical Institute. Thus we present the reminiscence about S.I. Isayev and the first years of the PGI. It is mainly based on the remembrances of L.S. Yevlashin, the PGI veteran and one of Isayev's associates.

The organizing committee