

Preface

It was on a warm sunny day of the summer 2011 that a few of us sitting together in Madrid and surrounded by the peaceful environment around ESAC, considered how far we were from a satisfactory understanding of the “Physics at the Magnetospheric Boundary” in accreting compact objects. The enormous variety of physical processes occurring in that tiny region where the accreting material and the star magnetic field mix together affects so deeply the observational behavior of the star in all energy domains that a remarkable amount of work has been invested on this subject since the early ‘60s.

It was soon realized that compact objects are not the only systems in which the physics at the magnetospheric boundary gives rise to puzzling physical outcomes. All stars surrounded by a rich environment and endowed with some magnetic field share the same destiny: their evolution and observational behavior is always affected by physical processes occurring at the magnetospheric boundary.

We thus convened to organize the first international conference entirely devoted to the investigation of the Physics at the Magnetospheric Boundary in the widest possible range of Astrophysical sources, spanning from neutron stars, to white dwarfs, T-Tauri stars and young stellar objects.

The “Physics at the Magnetospheric Boundary” conference was hosted at the Faculty of Sciences of the Univ. of Geneva, from 25 to 28 June 2013. It represented a precious opportunity of exchange between different research communities, stimulated new collaborations among various research groups and posed the bases for new promising advancements in the field.

We wish to thank all the participants for their effort in joining the conference and actively participating to all discussions.

A special thank goes to the administrative people of the Univ. of Geneva for their support. We are particularly grateful to Mme M. Logossou for her precious help with all aspects of the organization and to Mme F. Costa and M.-C. Dunand for their help with logistics.

We acknowledge financial support from the Societe Accademique de Geneva, the Commission administrative de l'Université de Genève, the Swiss National Science Foundation, the European Space Agency, the European Astronomical Society, and the department of Astronomy of the University of Geneva.

E. Bozzo, P. Kretschmar, M. Audard, M. Falanga, C. Ferrigno
Scientific Editors of the conference proceedings

