

EDITORIAL PREFACE

This volume collects articles by some of the participants at the international meeting "Set Theory in the Third Millennium", that took place at the Université Libre de Bruxelles (ULB) in December 2005, and was organized with the conjoint support of the FNRS (Fonds National de Recherche Scientifique), the CNRL (Centre National de Recherches de Logique) and the Belgian Society for Logic and Philosophy. The speakers were: Peter ACZEL (Manchester), Marco FORTI (Pisa), Sergei TUPAILO (Tallinn), and Thomas FORSTER (Cambridge).

This event was explicitly aimed at showing that, even more than one century after the shock of Russell's paradox (his letter to Frege dates from June 1902), set theory is still a very rich field of exploration, where many puzzling problems remain open, in particular concerning the consistency of several alternative set theories, among which the famous system NF (Quine's set theory "New Foundations") and the more recent "positive set theories" [an impressing attempt (probably forever condemned to stay non-exhaustive!) to list references linked to that kind of set theories (under the generic name "Set Theory with a Universal Set") has been undertaken by M.R. HOLMES]. The attempts to get adequate models also lead to the investigation of very elaborate mathematical tools, like ultrapowers, generalized measures, fixpoint constructions, topologies, uniformities, large cardinals, etc ..., showing the subtle connection between logic, set theory, and several branches of mathematics; so that the philosopher as well as the logician and the mathematician can find here some flavour of the vitality of the (however old!) concept of "set".

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