

PREFACE

The 14th International Conference on the *Mathematical Theory of Networks and Systems*, *MTNS'2000* was held in Perpignan, France, on June 19–23, 2000. The conference was organized by the *Laboratoire de Théorie des Systèmes, l'Université de Perpignan* and the *Centre des Mathématiques et Leurs Applications, Ecole Normale Supérieure de Cachan*, both in France. Over 500 scientists from 48 countries presented 480 lectures on topics from the broad area of systems, networks and control theory, including applications and the associated numerical solutions of problems. The full proceedings is only available as a CD-ROM, but selected papers have been chosen to be published in three special issues of the journal *International Journal of Applied Mathematics and Computer Science*. The papers from the nine plenary lectures and the nine mini-courses which were presented at the MTNS'2000 have already appeared in Volume 11, Number 1 in 2001.

The present special issue contains a representative selection of papers from *Infinite-dimensional Systems Theory and Operator Theory*. Infinite-dimensional systems theory is a relatively young research area which evolved in the sixties in an attempt to generalize the powerful techniques so successful in finite-dimensional systems and control theory to systems described by partial differential equations. While that remains an important motivation, from the very beginning, it was clear that there were close connections with operator theory, which has a long tradition. These links have been since explored and exploited by researchers from both disciplines and this cross-fertilization has greatly enriched both areas as is clearly illustrated in this special issue.

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