Preface

This collection of surveys is an outflow from the 2006 conference Carthapos06 in Tunis (Tunisia). Apart from regular conference talks, five survey talks formed the core of a workshop in Positivity, supported by the National Science Foundation. The conference organizers (Karim Boulabiar, Gerard Buskes, and Abdelmajid Triki) decided to expand on the idea of core surveys and the nine surveys in this book are the harvest from that idea.

Positivity derives from an order relation. Order relations are the mathematical tool for comparison. It is no surprise that seen in such very general light, the history of Positivity is ancient. Archimedes, certainly, had the very essence of positivity in mind when he discovered the law of the lever. His method of exhaustion to calculate areas uses a principle that nowadays carries his name, the Archimedean property. The surveys in this book are slanted into the direction that Archimedes took. Functional analysis is heavily represented. But there is more. Lattice ordered groups appear in the article by Martinez in the modern jacket of frames. Henriksen and Banerjee write their survey on rings of continuous functions. Blecher and de Pagter in each of their papers survey parts of non-commutative functional analysis. Positive operators are the main topic in the papers by Curbera and Ricker, Schep, and Wickstead. And positive bilinear maps are the protagonists in the survey by Bu, Buskes, and Kusraev. The conference organizers (and editors of this volume) write about f-algebras.

Carthapos06 was more than just a conference and workshop in Africa. It brought together researchers in Positivity from many directions of Positivity and form many corners of the world. This book can be seen as a culmination of their paths meeting in Tunisia, Africa.

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