## Preface

These Conference Proceedings contain the contributions presented at the XXII International Conference on Geometry, Integrability and Quantization, originally scheduled to take place at the Koral Hotel in the Saints Constantine and Elena resort in Varna, Bulgaria, between 8–13 June 2020. Due to the severe restrictions imposed by the various authorities in order to contain the spread of the virus, the event had to be finally rescheduled as a solely online conference. This has deprived the conference of one of its most characteristic features, namely the close interaction between the participants and the unscheduled scientific discussions, from which a great number of collaborations has emerged in the past. Nevertheless, the enthusiasm of the participants prevented the conference from being shifted time, also allowing the publication of this volume.

Principally promoted by the Institute of Biophysics of the Bulgarian Academy of Sciences, the conference has been organized jointly with the Technical University of Varna, the Tokyo University of Science and the Universidad Computense of Madrid. Geographically dispersed participants from Europe, Asia and the Americas have shared their research, ranging from Generalized Inverses Theory and Differential Geometry over Lie Theory and Representation theory to Noncommutative Geometry, Quantum Stochastic Calculus and Special Functions.

Due to the particular circumstances under which the conference was held, this year there is not a definite distinction in the final written contributions between the traditional lectures, plenary talks and the contributed talks, although the enumeration takes into account the scheduled presentation mode, as reflected in the original programme.

The organizers express their gratitude to all the participants for their efforts in maintaining the high standards of the conference, as well as for their written contributions, in spite of the difficulties created by the current sanitary emergency.

The Organizing Committee is indebted to the Advisory and Standing Committees for their constant advice, while the referees are acknowledged for their expert reports that, as usual, have guaranteed the high quality of the submissions.

Special mention should be made for the Bulgarian Academy of Sciences, the Technical University of Varna and the Tokyo University of Science, that have encouraged and supported the alternative solution to the original schedule, instead of simply postponing the conference, which would have discontinued the series.

Although there is currently a great uncertainty concerning the international situation for the summer of 2021, which impedes to establish a neat planification for the next edition of the conference, the organizers have the firm intention that, in case that the travel restrictions are still in effect, the online alternative of Geometry,