

Editorial

The 15th International Conference on Ordered Statistical Data (OSD2024) was held at the Department of Mathematics of the University of Coimbra, Portugal, from June 11-14, 2024, continuing a series of biennial meetings that began in Mysore in 2000 and has since moved around the globe, fostering the sharing of results and new methodologies among an increasing community focused on the mathematical theory and applications of ordered or censored statistical data.

Ordered statistical data appear commonly in various applied problems in statistics, with survival analysis and reliability problems being the most popular ones, while shape-constrained estimation gained recent interest, aiming to incorporate broader geometric properties into approximation and testing procedures. These applications raise quite challenging theoretical questions, unveiling properties, suggesting methods to conveniently approximate most of the unknown probabilistic characterisations, and helping to tackle the subtleties of the real-life procedures and the way they translate into mathematical models.

The OSD2024 programme included plenary lectures on topics in stochastic order problems and their applications, and nonparametric or semiparametric estimation problems. A number of contributed sessions showcased a variety of rather interesting talks ranging from the classical, for this conference series, discussions on stochastic orders, properties of order statistics, and the applications of these topics to coherent systems, to the treatment of complex censoring schemes, dealing with theoretical characterisations and estimation difficulties, with a special interest in nonparametric methods.

The Ordered Statistics Data conference series and, in particular, OSD2024 offer compatibility with a wide range programme while avoiding parallel sessions, thus contributing to broadening the knowledge on statistical theory and methodologies. The OSD2024 also profited from being held at a UNESCO World Heritage site, the University of Coimbra, complementing the scientific programme with cultural and historical visits to the University Palace, offering a glimpse of the student's life throughout time in one of the oldest universities in the world.

This special issue of *REVSTAT – Statistical Journal* includes a number of research articles issued from the talks presented at OSD2024. We are grateful to the authors for submitting their work. More generally, we are very grateful to the invited speakers and contributors who made this conference such an interesting event.

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Guest Editors

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