



Grassmannian calculus for probability

Simone Baldassarri and Alessandra Cipriani

Abstract. The present overview and gentle introduction to Grassmannian calculus and some of its applications to probability collects and extends the notes of a mini-course given by the authors at the Brazilian School of Probability, August 5–9, 2024, in Salvador, Bahia, Brazil. The content is by no means comprehensive, and is a personal summary and interpretation of results and applications of this interesting area of research.

Keywords. Grassmann variables, fermionic variables, Abelian sandpile, spanning tree, supersymmetry.