

# GROUPS, RINGS AND THE YANG-BAXTER EQUATION

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Abstract: Braces are ring-theoretical algebraic structures to study non-degenerate set-theoretic solutions of the Yang-Baxter equation. A typical example of a brace is a Jacobson radical ring. In this talk, we will discuss the basic properties of braces and how these structures are related to the Yang-Baxter equation. We will also discuss intriguing connections between the Yang-Baxter equation and braces, groups and non-commutative rings.