1063-18-132   **Alissa S Crans*** (`acrans@lmu.edu`), Department of Mathematics, Loyola Marymount University, One LMU Drive, Suite 2700, Los Angeles, CA 90045, and **J. Scott Carter**, **Mohamed Elhamdadi** and **Masahico Saito**. *Categorical Quandles and Knots I: Definitions and Examples.*

A quandle is a set equipped with two binary operations satisfying axioms that capture the essential properties of group conjugation and algebraically encode the three Reidemeister moves. A *2-quandle is a categorified version of a quandle, in which the underlying set has been replaced by a category and the two binary operations have been replaced by functors. We will begin by reviewing the notion of categorification and continue with the definition of a (strict) 2-quandle. We will discuss examples of 2-quandles and explore relationships with strict 2-groups, which are equivalent to crossed modules of groups. (Received August 12, 2010)*

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