1037-18-108 **Alissa S Crans*** (acrans@lmu.edu), Loyola Marymount University, Department of Mathematics, One LMU Drive, Suite 2700, Los Angeles, CA 90045, and **J. Scott Carter**, **Mohamed Elhamdadi** and **Masahico Saito**. *2-Quandles.* Preliminary report.

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 A '2-quandle' is a categorified version of a quandle, in which the underlying set has been replaced by a category and the two binary operations have been replaced by functors.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 discuss relationships between 2-quandles, 2-groups, and Lie 2-algebras and will explore the possibility of knot and 2-knot invariants arising from 2-quandles. (Received January 27, 2008)