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**Mohamed Elhamdadi, Masahico Saito and Emanuele Zappala\*** (zae@mail.usf.edu), 4202 E Fowler Ave, CMC 342, Tampa, FL 33620-5700. *Continuous Cohomology of Topological Quandles.*

Quandles are algebraic objects whose defining axioms are inspired by the Reidemeister moves on knot diagrams. Their main application, not surprisingly, comes from the classification of knots: The knot quandle is in fact known to be a complete invariant of knots, up to orientation and reversed mirror image. Their topological counterpart, called topological quandles, has been introduced by R.L. Rubinzstein to produce invariants of knots and links. In this talk, I will give the definition of continuous cohomology groups of topological quandles and investigate their main features such as: extensions of topological quandles and their correspondance with continuous second cohomology groups, inverse limits of quandles and their continuous cohomology groups. (Received September 01, 2018)