1163-57-27   **Blake Mellor*** (`blake.mellor@lmu.edu`) and **Riley Smith**. *Finite N-quandles of knots, links and graphs.*

In this talk, we will investigate a generalization of the n-quandle for a knot, link or spatial graph. If a link or spatial graph has k components or edges, and given a k-tuple $N = (n_1, \ldots, n_k)$ of positive integers, we define the N-quandle by adding relations $x^{y^{n_i}} = x$ to the full quandle whenever y is an arc of edge i. The usual n-quandle is the case when $n_i = n$ for every i. In this case, Hoste and Shanahan provided a complete list of links where the n-quandle is finite, proving a conjecture of Przytycki. We extend the conjecture to spatial graphs and links where the entries of N are not all the same, and provide evidence for the extended conjecture by computing finite N-quandles associated to a number of links and spatial graphs. (Received July 04, 2020)