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Yongju Bae* (ybae@knu.ac.kr), Department of Mathematics, College of Natural Sciences, Kyungpook National University, Daegu, 702-701, South Korea. *On properties of partition functions for Alexander quandles.*

For a given quandle cocycle, to calculate the partition function of a knot K , we need to find all possible quandle colorings of a diagram D of K . In that context, finite quandles are the only concerned to treat the partition function. In this talk, I will consider a method to treat the partition function for the Alexander quandle $\Lambda/(\Delta_L(t))$ even though $\Lambda/(\Delta_L(t))$ is infinite. Here $\Delta_L(t)$ denotes the reduced Alexander polynomial of L . (Received February 04, 2015)