1054-57-187   **Kanako Oshiro*** (`d085317@hiroshima-u.ac.jp`), Department of Mathematics, 1-3-1 Kagamiyama, Higashi-Hiroshima, Hiroshima 739-8526, Japan. *Relationship between quandle cocycle invariants and symmetric quandle cocycle invariants for oriented links.*

Quandle cocycle invariants, introduced by Carter et. al., are defined for oriented (classical or surface) links. On the other hand, symmetric quandle cocycle invariants, introduced by Kamada, are defined for all (classical or surface) links which are not necessarily orientable. By the structure of these invariants, we have the following question: For oriented links, which is stronger? In this talk, we give the answer. (Received September 14, 2009)