1078-51-112 Ayaka Shimizu* (shimizu1984@gmail.com), 3-3-138 Sugimoto, Sumiyoshi-ku, Osaka-shi, Osaka, 5588585, Japan. Region crossing change on link diagrams.

A region crossing change at a region of a link diagram is defined to be the crossing changes at all the crossing points on the boundary of the region. In this talk, we show that the region crossing change on a knot diagram is an unknotting operation, i.e., we can deform any knot diagram into a diagram of the trivial knot by region crossing changes. We also show properties of the region crossing changes on link diagrams. As an application, we introduce the game "Region Select" as a joint work with Akio Kawauchi and Kengo Kishimoto. (Received November 29, 2011)