## Normalization of the Rubinstein-Scharlemann graphic of Morse functions

## Kazuto Takao

## **Osaka University**

**Abstract.** The Rubinstein-Scharlemann graphic was introduced for studying Heegaard splittings and it has made a remarkable contribution to the recent development of this branch. However, the graphic is constructed through a pair of smooth functions on the 3-manifold and so has much ambiguity. To extract the maximum imformation from the graphic, we have to understand how the graphic can be changed by deforming these functions. In this talk, we collect local moves on the graphic realized by deforming the functions and take an approach to the normalization of the graphic.