The minimal number of singular sets of fold maps Minoru Yamamoto (Hokkaido University)

In 1970's, Eliashberg showed that every smooth map between oriented surfaces is homotopic to a fold map. A fold map is a smooth map which has only fold singularity (A_1 -type singularity). It is known that for a fold map between surfaces, singular set is a one-dimensional submanifold in the source surface. In this talk, we will determine the minimal number of components of singular set for fold maps when we fix the mapping degree and the genuses of source and target oriented closed surfaces.