

GRAPHIC CALCULUS OF MONODROMY REPRESENTATIONS OF TOPOLOGICAL OBJECTS

SEIICHI KAMADA

Monodromy representations often classify and bring us a lot of information for various topological objects; 2-dimensional braids, knotted surfaces in 4-space in braid forms, Lefschetz fibrations of 4-manifolds, algebraic curves, hyperplane arrangements, etc. However it is usually hard to classify the monodromy representations or even to decide whether two given representations are isomorphic or not. Here we introduce a method to describe monodromy representations for the topological objects, or any G -monodromy representations, by use of graphics, called *charts*. We would also like to introduce some recent results on 2-dimensional braids and Lefschetz fibrations that are collaborated with Y. Matsumoto, T. Matumoto and K. Waki.

HIROSHIMA UNIVERSITY