S. FUKUHARA
KODAI MATH. J.
17 (1994), 505—510

A NOTE ON EQUIVALENCE CLASSES OF PLATS

BY SHINJI FUKUHARA

1. Introduction

This note is summary of the author's paper [7]. By connecting strings in pairs on the top and the bottom of a braid (Figure 1), we obtain a plat (Figure 2).

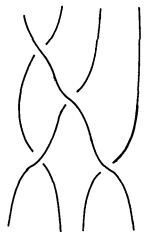

Figure 1

Figure 2

If it comes from a braid with 2n-strands, it is called a 2n-plat. Two plats are said to be equivalent if there is a homeomorphism h which carries upper and lower halves of $\mathbf{R}^3$ to themselves and a plat to the other plat (Figure 3).

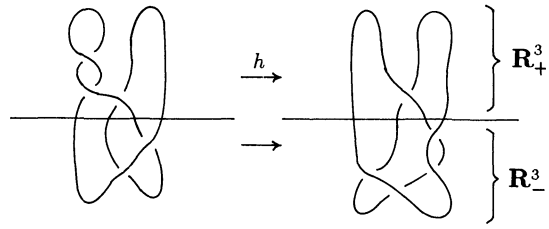

Figure 3

One of the main problems on plats is to decide when two plats are equivalent. In this note we assign a matrix to a plat and show that if two plats are equivalent then assigned matrices are equivalent in our sense. Furthermore we produce a numerical invariant from the matrices. Generally it needs a large amount of calculation to obtain the invariant. But it is quite elementary and can be done by an electric computer.

Received June 12, 1993.