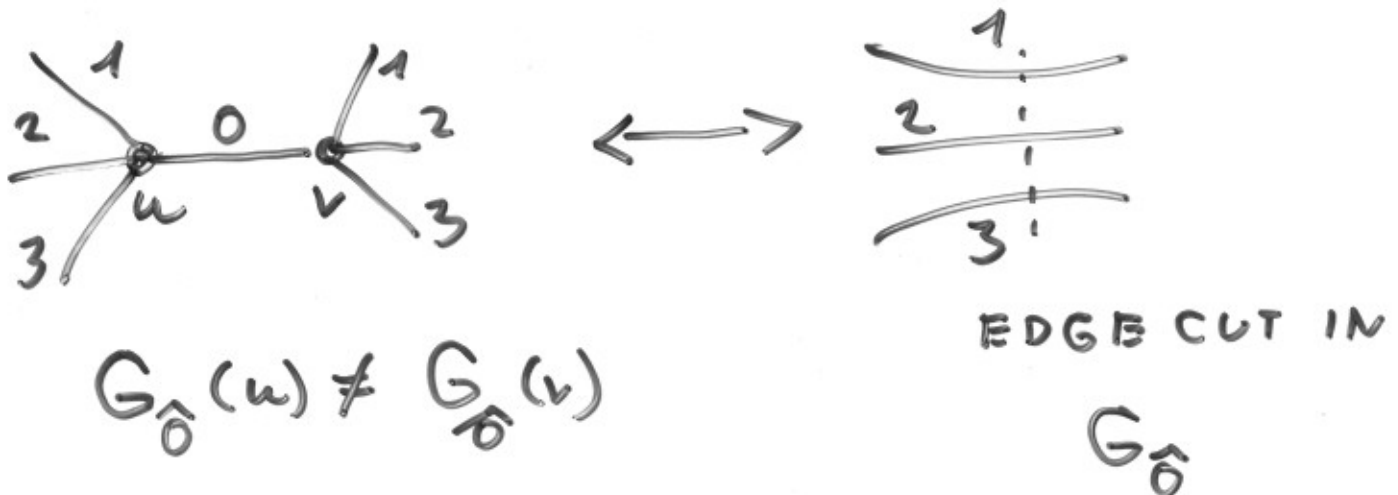


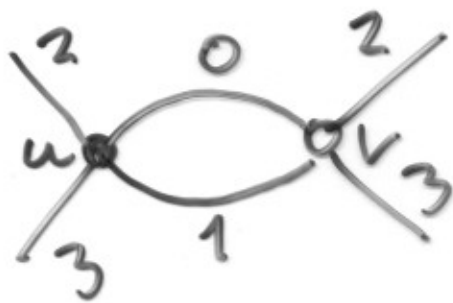
PROBLEM 1. LET CONSIDER A SET Γ_4
 OF 4-VALENT 4-EDGE-COLOURED GRAPHS.
 BIPARTITE

Let Θ_h be a 2 VERTEX GRAPH,
 WITH h PARALLEL EDGES JOINING
 THE VERTICES. IF $G \in \Gamma_4$ AND
 $C \subseteq \{0, 1, 2, 3\}$ IS A SUBSET OF COLOURS
 DENOTE $G_{\hat{C}} \subseteq G$ THE FACTOR OF G
 INDUCED BY $\hat{C} = \{0, 1, 2, 3\} \setminus C$.

DIPOLE MOVES:

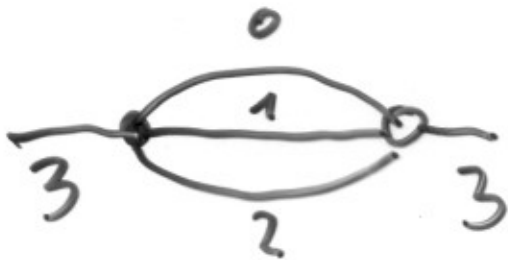


-2-



EDGE CUT

$$G_{\text{EC}}(u) \neq G_{\text{EC}}(v)$$



$G \approx G'$ if \exists a sequence
of moves transforming G
ONTO G'

DECISION P. IS $G \approx G'$ AN ALGOR.
SOLVABLE PROBLEM?

CONSIDER THE SAME QUESTION
FOR BIP. 3-EDGE-COL. CUBIC GRAPHS.

PROBLEM 2.

CLASSIFY REG. EMB. OF $K_{m,m}^2$

m - odd?

THE SAME AS ISOBICYCLIC TRIPLES

$\langle G; x, y \rangle$, FIRST STEP:

GROUPS OF THE FORM $A \cdot B$

$A, B \cong \mathbb{Z}_m, \exists d \in \text{Aut } G$

$$\mathcal{L}(A) = B$$

PROBLEM 3.

DETERMINE CIRCULANTS WITH

$$\chi(G) = \text{val } G.$$