

# On Shortest Cycle Covers and Circular Flows

André Raspaud  
*LaBRI UMR CNRS 5800, Université Bordeaux I,*  
*33405 Talence Cedex*  
FRANCE.

raspaud@labri.fr

4 novembre 2005

## Résumé

A *cycle cover* of a graph  $G$  is a family of cycles of  $G$  such that each edge of  $G$  is contained in at least one cycle of the family. The *length* of a cycle cover  $\mathcal{C}$ , is the sum of the lengths (number of edges) of the cycles in  $\mathcal{C}$ .

The *shortest Cycle Cover Problem (SCCP)* is to find a cycle cover of shortest length. In this talk we will survey the known results and present the link between shortest cycle covers and circular flows.