## A GENERALIZATION OF IDENTIFYING CODES, THE WATCHING SYSTEMS

David Auger, Irène Charon, Olivier Hudry and Antoine Lobstein

We introduce the notion of watching systems in graphs, which is a generalization of that of identifying codes. We give some basic properties of watching systems, an upper bound on the minimum size of a watching system, and results on the graphs which achieve this bound; we also study the cases of the paths and cycles, and give complexity results.