

Study of watching systems in cubic graphs

Sheyda Maddah¹ and Modjtaba Ghorbani¹

¹Department of Mathematics, Faculty of Science, Shahid Rajaei Teacher Training University,
sheydaaa.1989@gmail.com

A watching system in a graph G , which is an extension of identifying code, is a finite set $W = \{w_1, w_2, \dots, w_k\}$ where each w_i is a couple $w_i = (v_i, Z_i)$, where v_i is a vertex and $Z_i \subseteq NG[v_i]$ such that $\{Z_1, \dots, Z_k\}$ is an identifying system. In the present paper, we determine the watching number of some well-known cubic graphs.

References

- [1] D. Auger, I. Charon, O. Hudry and A. Lobstein, Maximum size of a minimum watching system and the graphs achieving the bound (submitted).
- [2] D. Auger, I. Charon, O. Hudry and A. Lobstein, Watching systems in graphs: an extension of identifying codes, *Discrete Appl. Math.* (2011) (to appear).
- [3] D. Auger, I. Charon, O. Hudry and A. Lobstein, Watching systems in graphs: an extension of identifying codes, *Discrete Appl. Math.* **161**(12) (2013), 1674–1685.