

Addendum

Recently we have been pointed out that a strengthening of Theorem 7 can be derived from a result showed by Balister *et al.* [1]. In their paper the authors study the notion of adjacent vertex-distinguishing edge-coloring, which is a proper edge-coloring such that for each pair of adjacent vertices u and v , the set of colors incident to u is not equal to the set of colors incident to v . The minimum number of colors required to obtain an adjacent vertex distinguishing edge-coloring of G is denoted $\chi'_a(G)$.

Note that when the graph is Δ -regular, a $(\Delta - 1)$ -intersection $(\Delta + 1)$ -edge coloring is equivalent to an adjacent vertex-distinguishing edge-coloring. In the context of subcubic graphs, Balister *et al.* proved the following result:

Theorem 1 (Balister *et al.* [1]). *Let G be a subcubic graph with no isolated edge, then $\chi'_a(G) \leq 5$.*

From this result a strengthening of Theorem 7 of our paper follows easily :

Corollary 2. *Let G be a subcubic graph. Then $\chi'_{2-int}(G) \leq 5$.*

Moreover, as mentioned in Section 2 of our paper, there are subcubic graphs with $\chi'_{2-int}(G) = 5$ and thus the result of the above corollary is tight.

References

- [1] P.N. Balister, E. Győri, J. Lehel and R.H. Schelp. Adjacent vertex-distinguishing edge-colorings. *SIAM Journal on Discrete Mathematics*, 21(1):237–250, 2007.