

Erratum to: *On the unitary Cayley graph of a finite ring*

In the second statement of Proposition 10.2, the computation of the spectrum of G_S when S is a local ring with nonzero maximal ideal \mathfrak{m} of size m is not correct.

For such S , G_S is a balanced complete multipartite graph with $f = S/\mathfrak{m}$ partite sets, each of size $m = |\mathfrak{m}|$. This graph is strongly regular (cf. [1, 10.2 and 10.3]) and as such its spectrum is known:

$$\text{Spec}(G_S) = \begin{pmatrix} (f-1)m & 0 & -m \\ 1 & fm-f & f-1 \end{pmatrix}$$

Corollary 10.3 should then be deleted, as there is no elegant way of expressing the result in corrected form.

We thank Mohsen Aghaei for pointing out the error in the original version.

References

- [1] C. Godsil and G. Royle. *Algebraic Graph Theory*. Springer, 2001.