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The Falsity of the Reconstruction Conjecture for Tournaments

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Erratum to: “The Falsity of the Reconstruction Conjecture for Tournaments”

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It has been brought to my attention by Ramachandran that there is an error in the proof of Theorem 1 in my paper [1]. The theorem is true—the pairs of vertex-deleted tournaments are isomorphic—but the description of the isomorphism is incorrect. The number r_i should not be the remainder of i modulo 2^{p_i+1} as stated, but rather the number in the range $1, \dots, 2^{p_i+1}$ that is congruent to i modulo 2^{p_i+1} . In other words, $r_i = ((i - 1) \bmod 2^{p_i+1}) + 1$. With this revised definition, the phrase “(reducing modulo 2^p if necessary)” becomes superfluous and should be omitted. In Table 1, the entries r_4 and r_8 should both be 4, not 0.

Kocay [2] has also pointed out that the original isomorphism description was incorrect, and provided an alternative proof of the theorem. His existence proof avoids the construction of explicit expressions for the isomorphisms.

Finally, there is a typographical error in line 18 on page 22: the equation “ $\text{pow}(j' - i) = p_j$ ” should read “ $\text{pow}(j' - i') = p_j$ ”.

REFERENCES

- [1] P. K. Stockmeyer, The falsity of the reconstruction conjecture for tournaments, *J Graph Theory* 1 (1977), 19–25.
- [2] William L. Kocay, On Stockmeyer’s non-reconstructible tournaments, *J Graph Theory* 9 (1985), 473–476.