

ERRATUM TO THE ZERO FORCING NUMBER OF GRAPHS

THOMAS KALINOWSKI, NINA KAMČEV, AND BENNY SUDAKOV

In Theorem 1.4, the bound (i) is incorrect, and should be replaced by

$$Z(G) \geq n \left(1 - \frac{2\lambda}{d + \lambda} \right). \quad (1)$$

As defined in the paper, $\lambda = \max\{|\lambda_i| : i = 2, \dots, n\}$.

To prove (1), we apply Theorem 4.1(ii) instead of the incorrect inequality 4.1(i). Upon replacing $-\lambda_{\min}$ by λ , the original proof goes through. We repeat it here for the reader's convenience.

Proof of (1). Let (\mathbf{s}, \mathbf{t}) be a k -witness in G , and $k = 2\mu n$. By definition of a witness, there are no edges between the sets $U = \{s_1, s_2, \dots, s_{\mu n}\}$ and $W = \{t_{\mu n+1}, \dots, t_k\}$. Hence, using Theorem 4.1 (ii),

$$0 = e(U, W) \geq d\mu^2 n - \lambda\mu n(1 - \mu) = \mu n (d\mu - \lambda(1 - \mu)) = \mu n (\mu(d + \lambda) - \lambda),$$

which implies $\mu \leq \lambda/(d + \lambda)$. Hence the largest witness in G has order at most $2\lambda n/(d + \lambda)$, which by Lemma 3.1 implies

$$Z(G) \geq n \left(1 - \frac{2\lambda}{d + \lambda} \right). \quad \square$$

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