

## Comment on Volume 7, article R47 (2000)

### “A Turán Type Problem Concerning the Powers of the Degrees of a Graph”

Yair Caro and Raphael Yuster

Comment by the authors, August 11, 2004:

In the original version of this paper Theorem 1.1 was mistakenly stated for all  $p$ . This was also observed by Pikhurko [2] and by Schelp. The theorem is valid only in the linear, quadratic and cubic cases. Namely:

Let  $k > 2$  be a positive integer, and let  $p = 1, 2, 3$ . Then  $t_p(n, K_k) = e_p(T(n, k))$ , where  $T(n, k)$  is the Turán Graph.

Theorem 1.1 is sharp in the sense that for  $p \geq 4$ ,  $t_p(n, K_k)$  is *not* obtained by the Turán graph. This can already be seen by the fact that the complete bipartite graph  $G = K_{\lfloor n/2-1 \rfloor, \lceil n/2+1 \rceil}$  has  $e_4(G) > e_4(T(n, 3))$ .

A revised version of this paper addressing this comment can be found in [1].

## References

- [1] Y. Caro and R. Yuster, *A Turán Type Problem Concerning the Powers of the Degrees of a Graph (revised)*,  
arXiv:math.CO/0401398 (2004).
- [2] O. Pikhurko, *Remarks on a paper of Y. Caro and R. Yuster on a Turán problem*,  
arXiv:math.CO/0101235 (2001).