Cover letter: Binding number, minimum degree and (g, f)-factors of graphs

Takamasa Yashima

Dear Editors of Contributions to Discrete Mathematics,

I would like to submit my manuscript entitled "Binding number, minimum degree and (g, f)-factors of graphs" for publication as an contribution in Contributions to Discrete Mathematics.

Let a and b be integers with $2 \le a < b$, and let G be a graph of order n with $n \ge \frac{(a+b-1)^2}{a+1}$ and the minimum degree $\delta(G) \ge 1 + \frac{(b-2)n}{a+b-1}$. Let g and f be non-negative integer-valued functions defined on $V(G)$ such that $a \le g(x) < f(x) \le b$ for each $x \in V(G)$. We prove that if the binding number $\mathrm{bind}(G) \ge 1 + \frac{b-2}{a+1}$, then G has a (g, f)-factor.

Remark that my proof is very simple and the paper is very short. I believe that it is worth to publishing it on Contributions to Discrete Mathematics.

We confirm that this manuscript has not been published elsewhere and is not under consideration by another journal.

I am looking forward to hearing from you at your earliest convenience.

Yours sincerely,
Takamasa Yashima

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