

ERRATA CORRIGE: THE MATCHING PROBLEM FOR BEHAVIORAL SYSTEMS

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It has been brought to the authors' attention by N. Karcianas and D. Vafiadis (personal communication) that the proof of Proposition 7 in the mentioned paper contains an incorrect assertion.

In the proof of Proposition 7 it is assumed that a rational matrix $W(s)$ can be written as a product $V(s)P(s)$, where $P(s)$ is polynomial and $V(s) = \text{diag}(s^{-\alpha_1}, s^{-\alpha_2}, \dots, s^{-\alpha_1})$. This is obviously not true in general and, actually, what is needed in the proof is to write $W(s)$ as a product $V(s)P(s)$ where $V(s) = \text{diag}(\alpha_1^{-1}(s), \alpha_2^{-1}(s), \dots, \alpha_n^{-1}(s))$, with $\alpha_i(s)$ non zero polynomials for $i = 1, 2, \dots, n$, and $P(s)$ polynomial. Taking $V(s) = \text{diag}(\alpha_1^{-1}(s), \alpha_2^{-1}(s), \dots, \alpha_n^{-1}(s))$ the proof proceeds without any change and the result of Proposition 7 holds.

REFERENCES

- [1] G. Conte and A. M. Perdon: The matching problem for behavioral systems. *Kybernetika* 31 (1995), 6, 613–621.

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