Mathematics of Control, Signals, and Systems

## Lyapunov Exponents of Pairs of Matrices, a Correction\*

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The last sentence of Corollary 2 in [TB] states that it is NP-hard to decide whether all products of two given real matrices are stable and "that this is true even if the matrices have  $\{0, 1\}$  entries." The latter part of this statement is incorrect. The correct statement is that "this is true even if all nonzero entries of the two matrices are constrained to be equal." In fact, [G] provides a polynomial-time algorithm for the case of binary matrices.

## References

[G] L. Gurvits, Stability of Linear Inclusions—Part 2, NECI Technical Report TR 96-173 (1996).

[TB] J. N. Tsitsiklis and V. D. Blondel, The Lyapunov Exponent and Joint Spectral Radius of Pairs of Matrices Are Hard—When Not Impossible—To Compute and To Approximate, *Math. Control Signals Systems*, 10 (1997), 31–40.

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