

## Accepted Manuscript

Numerical methods for the stability of time-periodic hybrid time-delay systems with applications

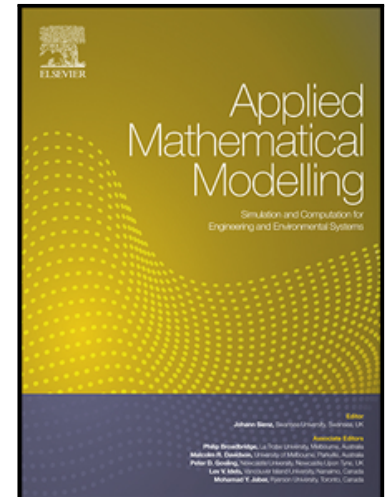
David Lehotzky, Tamas Insperger, Gabor Stepan

PII: S0307-904X(17)30767-9  
DOI: [10.1016/j.apm.2017.12.029](https://doi.org/10.1016/j.apm.2017.12.029)  
Reference: APM 12110

To appear in: *Applied Mathematical Modelling*

Received date: 5 September 2017  
Revised date: 6 December 2017  
Accepted date: 13 December 2017

Please cite this article as: David Lehotzky, Tamas Insperger, Gabor Stepan, Numerical methods for the stability of time-periodic hybrid time-delay systems with applications, *Applied Mathematical Modelling* (2017), doi: [10.1016/j.apm.2017.12.029](https://doi.org/10.1016/j.apm.2017.12.029)



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Highlights

- The pseudospectral tau method is extended to time-periodic hybrid time-delay systems.
- The spectral element method is extended to time-periodic hybrid time-delay systems.
- Stability analysis is performed for a haptic system involving both continuous and discrete delay terms.
- Stability analysis is performed for a milling process with digitally controlled active vibration suppression.

ACCEPTED MANUSCRIPT

---

\*Corresponding author  
E-mail address: lehotzky@mm.bme.hu

Download English Version:

<https://daneshyari.com/en/article/8051804>

Download Persian Version:

<https://daneshyari.com/article/8051804>

[Daneshyari.com](https://daneshyari.com)