

**V. Havu<sup>1</sup> and J. Malinen:** *Approximation of the Laplace transform by the Cayley transform*; Helsinki University of Technology, Institute of Mathematics, Research Reports A480 (2004).

**Abstract:** *We interpret the usual Cayley transform of linear (infinite-dimensional) state space systems as a numerical integration scheme of Crank–Nicholson type. This turns out to be equivalent to an approximation procedure of the Laplace transform. The convergence properties of such an approximation are investigated.*

**AMS subject classifications:** 47A48, 65J10, 93C25, (34G10, 47N70, 65L70)

**Keywords:** Conservative system, Crank–Nicholson scheme

### Correspondence

Ville.Havu@tkk.fi, Jarmo.Malinen@tkk.fi

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Helsinki University of Technology  
Department of Engineering Physics and Mathematics  
Institute of Mathematics  
P.O. Box 1100, 02015 HUT, Finland  
email:math@hut.fi <http://www.math.hut.fi/>

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