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# ADVANCES IN NUMERICAL METHODS FOR LINEAR AND NON-LINEAR DYNAMICS AND WAVE PROPAGATION

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**ALEXANDER IDESMAN*, HAUKE GRAVENKAMP** AND ELENA ATROSHCHENKO*****

*Texas Tech University
Box 41021, Lubbock, TX 79409-1021, USA
E-mail: alexander.idesman@ttu.edu
http://www.depts.ttu.edu/ME/faculty/faculty.php?name=Alexander%20Idesman

**Universität Duisburg-Essen
Universitätsstrasse 15, 45141 Essen, Germany
E-mail: hauke.gravenkamp@uni-due.de
https://www.uni-due.de/statik/en/h_gravenkamp

*** University of New South Wales
Sydney, NSW 2052, Australia
E-mail: e.atroshchenko@unsw.edu.au
https://www.engineering.unsw.edu.au/civil-engineering/staff/elena-atroshchenko

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## ABSTRACT

The objective of this symposium is to discuss new advances in numerical methods for linear and non-linear dynamics and wave propagation. Topics of interest include, but are not limited to: new space and time discretization methods for dynamical systems; high-order accurate methods including finite, spectral, isogeometric elements and others; methods with reduced numerical dispersion; filtering spurious oscillations; fictitious domain methods for complex geometry and with the special treatment of the boundary conditions; new implicit and explicit time-integration methods for structural dynamics, wave propagation and impact problems; adaptive methods as well as space and time error estimators; application of new numerical methods to engineering dynamics and wave propagation problems; and others.