

# LINEAR ALGEBRA AND ITS APPLICATIONS

## CALL FOR PAPERS

### Special Issue on *Accurate Solution of Eigenvalue Problems*

The accurate solution of eigenvalue problems, including singular value problems, has strong theoretical roots in linear algebra as well as applications in areas as diverse as control theory, image processing, data mining, and model reduction. Although the submissions to this special issue are open to all researchers in this field, the theme of this special issue was designed in tandem with the Ninth International Workshop on Accurate Solution of Eigenvalue Problems in Napa, California, USA on June 4-7, 2012.

Linear Algebra and Its Applications (LAA) has previously published three special issues devoted to the accurate solution of eigenvalue problems; see Vol. 309 (2000), Vol. 358 (2002), and Vol. 417 (2006) (J. Barlow, B. Parlett, K. Veselić, editors).

Subsequent years have brought about continuing research interest in accurate solution of eigenvalue and singular value problems from a variety of perspectives, thus the necessity of another issue that explores the state of this field. This special issue will be open to all aspects of eigenvalue problems, from core aspects and perturbation theory to algorithm development and practical problems, including but not limited to

- Eigenvalue perturbation theory
- Eigenvalue problems for structured and parameterized matrices
- Large, sparse eigenvalue and singular value problems
- Nonlinear eigenvalue problems
- Solution of eigenvalue problems on high-performance and distributed architectures
- Solution of eigenvalue and singular value problems arising in applications
- Numerical solution of inverse eigenvalue problems

The **deadline for submission** of papers is **February 28, 2013**, and the special issue is expected to be published in late 2013 or early 2014. Papers should be submitted to the responsible editor-in-chief, Volker Mehrmann, choosing the special issue “Accurate Solution of Eigenvalue Problems”, through the electronic submission system of LAA at <http://ees.elsevier.com/laa>. They must meet the publication standards of LAA, must fall within the scope of the journal, and will be refereed in the usual way.

The editors for this special issue of LAA are:

Jesse L. Barlow  
Department of Computer Science and Engineering  
The Pennsylvania State University  
University Park, PA 16802-6822 USA  
[barlow@cse.psu.edu](mailto:barlow@cse.psu.edu)

Ilse C.F. Ipsen  
Department of Mathematics  
North Carolina State University  
Raleigh, NC 27695-8205 USA  
[ipsen@ncsu.edu](mailto:ipsen@ncsu.edu)

Zlatko Drmač  
Department of Mathematics  
University of Zagreb  
Bijenička 30, 10000  
Zagreb, Croatia  
[drmac@math.hr](mailto:drmac@math.hr)

Julio Moro  
Universidad Carlos III de Madrid  
Departamento de Matemáticas  
Avenida de la Universidad, 30  
28911, Leganés, Madrid  
[jmoro@math.uc3m.es](mailto:jmoro@math.uc3m.es)

The responsible editor-in-chief for the special issue is Volker Mehrmann ([mehrmann@math.tu-berlin.de](mailto:mehrmann@math.tu-berlin.de)).