

# Prof.dr.sc. Zlatko Drmač

Dr.rer.nat. (*summa cum laude*) FU Hagen University, 2005.

Research interest: Numerical linear algebra, matrix theory, numerical methods in control theory, numerical software development, data mining

## Awards:

- SIAM Activity Group on Linear Algebra Prize 2009.
- State award for scientific achievements 2005.

## Recent papers:

- [1] Z. Bujanović, Z. Drmač: *A new framework for implicit restarting of the Krylov-Schur algorithm*, Numerical Linear Algebra with Applications Vol 22., No. 2 (2015), pp 220-232.
- [2] Z. Drmač, S. Gugercin and C. Beattie : *Quadrature-based Vector Fitting for discretized  $H_2$  approximation*, SIAM Journal on Scientific Computing, Vol. 37., No. 2. (2015) Available online at <http://pubs.siam.org/toc/sjoc3/37/2>
- [3] Z. Drmač, T. Sikić: *On spectral properties of a matrix of specialized roots of Lie algebra  $sl_n$* , Rad HAZU, Matematicke znanosti (Croatian Academy of Sciences and Arts (HAZU)), Vol. 18 (2014) pp 55-72.
- [4] N. Bosner, Z. Bujanović, Z. Drmač: *Efficient generalized Hessenberg form and applications*, ACM Transactions on Mathematical Software, 39 (2013), 3; 19:1-19:19.
- [5] Z. Bujanović, Z. Drmač: *A contribution to the theory and practice of the Kogbetliantz method for computing the SVD*. BIT Numerical Mathematics, Vol. 52, No. 4 (2012), pp 827-849

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- [1] Z. Bujanović, Z. Drmač: *A new framework for implicit restarting of the Krylov-Schur algorithm*, Numerical Linear Algebra with Applications Vol 22., No. 2 (2015), pp 220-232.
- [2] Z. Drmač and K. Veselić: *New fast and accurate Jacobi SVD algorithm: I*. SIAM J. Matrix Anal. Appl. Vol. 29, No. 4, (2008) pp. 1322—1342. (SIAM LA Prize winning paper.)
- [3] Z. Drmač and K. Veselić: *New fast and accurate Jacobi SVD algorithm: II*. SIAM J. Matrix Anal. Appl. Vol. 29, No. 4, (2008) pp. 1343—1362. (SIAM LA Prize winning paper.)
- [4] Z. Drmač: *A posteriori computation of the singular vectors in a preconditioned Jacobi SVD algorithm*, IMA J. Numer. Anal. 19 (1999), 191-213.
- [5] Z. Drmač: *Accurate computation of the product induced singular value decomposition with applications*, SIAM J. Numer. Anal. 35 (1998), 1969-1994.