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Professor Rene Alt passed away on 28th April 2017

Message from his PhD students

We are deeply saddened to inform you that Rene Alt passed away on April 28th. He was Emeritus Professor in the Computer Science laboratory of Pierre & Marie Curie University (UPMC) in Paris. He was former Vice-President of UPMC. His research activities were centered around probabilistic approaches for the numerical validation of software. He was interested in various sujects such as numerical analysis, statistics, probability, high performance computing, and medical imaging. Open to the others, Rene had developed international collaborations, in particular with the team leaded by Svetoslav Markov in the Bulgarian Academy of Sciences. In the frames of this collaboration a number of scientific papers have been published [1]-[14].

Rene had organized conferences such as SCAN, the international symposium on Scientific Computing, Computer Arithmetic and Validated Numerics, in 2002 in Paris. Rene's death is a great loss to all of us who had the chance to work with him. His vast culture was leading to very fruitful discussions. We will miss his generosity and his kindness. Our thoughts go to his family, especially his spouse and his son.

> Cordially, Fabienne Jezequel & Jean-Luc Lamotte

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References

- Alt, R., Markov, S., On the Algebraic Properties of Stochastic Arithmetic. Comparison to Interval Arithmetic, In: Scientific Computing, Validated Numerics, Interval Methods (Ed. W. Kraemer, J. Wolff von Gudenberg), Kluwer, 2001, 331–341.
- [2] Markov, S., R. Alt, J.-L. Lamotte, Stochastic Arithmetic: Sspaces and some Applications, Numerical Algorithms 37 (1-4), 275284, 2004.
- [3] Markov, S., R. Alt, Stochastic Arithmetic: Addition and Multiplication by Scalars, Applied Numerical Mathematics 50, 475– 488, 2004.
- [4] Alt, R., J.-L. Lamotte, S. Markov, Numerical Study of Algebraic Solutions to Linear Problems Involving Stochastic Parameters, In: Lirkov, I., S. Margenov, J. Wasniewski (Eds.), Large-Scale Scientific Computing (LSSC'2005), LNCS 3743, Springer, 2006, 273–280.
- [5] Alt, R., J.-L. Lamotte, S. Markov, On the numerical solution to linear problems using stochastic arithmetic, SAC06 April 2327, 2006, Dijon, France, ACM Publ.
- [6] Alt, R., J.-L. Lamotte, S. Markov, Abstract structures in stochastic arithmetic, In: B. Bouchon-Meunier, R. R. Yager (Eds.), Proc. 11-th Conference on Information Processing and Management of Uncertainties in Knowledge-based Systems (IPMU 2006), Editions EDK, Paris, 2006, 794–801.
- [7] Alt, R.,J.-L. Lamotte, S. Markov, On the Solution to Numerical Problems using Stochastic Arithmetic, In: Bob Werner (Ed.), SCAN 2006 Conf. Post-Proceedings, IEEE Proc. of the 12th GAMM-IMACS Intern. Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics, Duisburg, Germany, Sept 26-29, 2006. IEEE Computer Society, ISBN-13:

978-0-7695-2821-2, ISBN-10: 0-7695-2821-X, accessible through IEEE data base Xplore.

- [8] Alt, R., J.-L. Lamotte, S. Markov, Testing Stochastic Arithmetic and CESTAC Method via Polynomial Computation, In: P. Melin et al. (Eds.): Foundations of Fuzzy Logic and Soft Computing (IFSA 2007), LNAI 4529, Springer, 2007, 1322.
- [9] Alt, R., J.-L. Lamotte, S. Markov, Numerical Study of Algebraic Problems Using Stochastic Arithmetic, In: I. Lirkov, S. Margenov, J. Wasniewski (Eds.): Large-Scale Scientific Computing, LNCS 4818, 123–130, Springer, 2008.
- [10] Alt, R., Jean-Luc Lamotte, S. Markov, Stochastic Arithmetic, Theory and Experiments. Serdica Journal of Computing 4, 1, 2010, 110.
- [11] Alt, R., J.-L. Lamotte, S. Markov, On the Accuracy of the Solution of Linear Problems on the CELL Processor, Reliable Computing 15, 2011, Issue 1, 112.
- [12] Alt, R., S. Markov, Theoretical and Computational Studies of Some Bioreactor Models, Computers & Mathematics with Applications 64 (3), 2012, 350360.
- [13] Radchenkova, N., M. Kambourova, S. Vassilev, R. Alt, S. Markov, On the mathematical modelling of EPS production by a thermophilic bacterium, Biomath 3/1 1407121.
- [14] Alt, R., J.-L. Lamotte, S. Markov, Quasilinear structures in stochastic arithmetic and their application, Serdica Journal of Computing 10, 2016, ISSN:1312-6555, accepted.