

IN MEMORIAM



ZLATKO UDOVIČIĆ
(1971–2012)

Dr. Zlatko Udovičić, without warning, passed away on October 28, 2012. His sudden death, at the too young age of 41, was a horrible shock for his wife Ivana and their three wonderful children. His passing deeply saddened, his colleagues, co-authors, students at the Faculty of Natural Sciences and Mathematics of the University of Sarajevo and the mathematical community of Bosnia and Herzegovina in general.

Zlatko Udovičić was born on June 9, 1971. in Mostar where he finished elementary and high school. He enrolled in the Mathematics Faculty of the University of Belgrade in the fall of 1990 and graduated in 1998 with a grade point average of 8.8 (out of a maximum of 10), receiving a bachelor's degree in Mathematics. After receiving his degree, he was elected as an assistant for the subject Numerical Mathematics in the Department of Mathematics

of the Faculty of Natural Sciences and Mathematics of the University of Sarajevo.

He enrolled in the Graduate Program in Mathematics at the University of Belgrade in 1999. Zlatko passed all exams in this program with straight A grades. He defended his Master's Degree thesis, entitled "Determining the Level of Compression of Transformations of Orthonormed Waves", under supervision of Prof. Dr. Desanka Radunović, in 2005, thus receiving the degree of Master of Mathematics.

His Doctorial thesis, entitled "Splines in Numerical Integration", under supervision of Prof. Dr. Boško Jovanović was successfully defended at the Department of Mathematics of the Natural Science and Mathematics Faculty of the University of Sarajevo on December 10, 2010, thus receiving the degree of Doctor of Mathematics.

He was elected higher assistant in 2007 for subject Applied Mathematics, and was elected docent for that subject and the subject Mathematical Education in June 2011.

Zlatko had three study trips abroad to the Mathematics Faculties in Vienna (in 2006) and Granada (in 2011 and 2012).

From his first election as an assistant until his death Zlatko led tutorial sessions in the following subjects at the Faculty of Natural Science and Mathematics: Introduction to numerical mathematics, Numerical Mathematics, Introduction to Mathematical Logic, Numbers and Polynomials, Algebraic computer packages, Mathematics I (for physics students), Mathematics II (for physics students). Up to the introduction of the Bolonja process at the faculty he led tutorial sessions from the following subjects: Numerical mathematics and linear programming, Introduction to Mathematics, Methods in the Teaching of Mathematics and Mathematical Analysis (for physics students). After has been elected docent in 2011, besides those at his home faculty, Zlatko worked as lecturer in the subjects of mathematics at various other faculties of the University of Sarajevo such as the Faculty of Civil Engineering, Faculty of Mechanical Engineering, Faculty of Pharmacy.

In his short academic career he published a significant number of research and pedagogical articles. He published 11 research articles (the list of them is bellow), 10 specialized papers in pedagogical and methods journals and 6 research papers in the proceedings of the scientific conferences held in the countries of the former Yugoslavia and abroad. In additional he delivered 21 scientific-educational lectures at mathematical conferences in various European countries.

Zlatko was a warm, out going person, always full of good cheer, liked and respected by all he came in contact with. In a brief scientific career of just under 14 years he accomplished a great deal. We are all impoverished by

the loss of a wonderful colleague and co-worker. We will miss him and keep a place in our hearts for the times we shared together.

Prof. dr. Šefket Arslanagić

Research publications

- [1] Z. Udovičić and Mirna Udovičić, *A certain class of quadratures with even Tchebychev weights*, An. Stiint. Univ. "Ovidius" Constanta Ser. Mat., 20 (2012), no. 1, 447-458.
- [2] Z. Udovičić, *Numerical integration using cardinal B-splines*, Math. Balkanica (N.S.), 25 (2011), no. 5, 593-602.
- [3] Z. Udovičić, *On the interpolating quadratic spline. Approximation and computation*, 461-467, Springer Optim. Appl., 42, Springer, New York, 2011.
- [4] Z. Udovičić, *Splines in numerical integration*, Math. Balkanica (N.S.), 24 (2010), no. 3-4, 351-358.
- [5] Z. Udovičić, *A certain class of quadratures with cubic B-spline as a weight function*, Gen. Math., 18 (2010), no. 3, 83-90.
- [6] Gradimir V. Milovanović and Z. Udovičić, *Calculation of coefficients of a cardinal B-spline*, Appl. Math. Lett., 23 (2010), no. 11, 1346-1350.
- [7] Z. Udovičić, *A certain class of quadratures with hat function as a weight function*, Acta Univ. Apulensis Math. Inform., 20 (2009), 251-257.
- [8] Z. Udovičić, *Calculation of the moments of the cardinal B-spline*, Sarajevo J. Math., 5(18) (2009), no. 2, 291-297.
- [9] Z. Udovičić, *One point quadrature rule with cardinal B-spline*, J. Math. Anal. Appl., 360 (2009), no. 2, 432-438.
- [10] Z. Udovičić, *Some modifications of the trapezoidal rule*, Sarajevo J. Math., 2(15) (2006), no. 2, 237-245
- [11] Z. Udovičić, *Numerical stability of a class (of systems) of nonlinear equations*, Mat. Vesnik, 57 (2005), no. 1-2, 27-33.