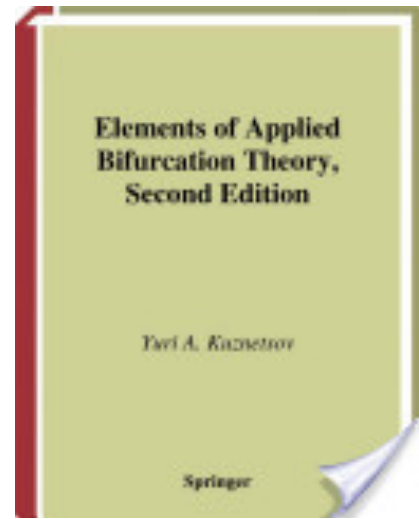




Professor Yuri Aleksandrovich Kuznetsov



Yuri A. Kuznetsov, Elements of Applied Bifurcation Theory, 2nd Edition, Springer, 1998

See:

http://www.scholarpedia.org/article/User:Yuri_A._Kuznetsov

<http://www.uu.nl/medewerkers/IAKouznetsov/0>

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Biography (from Scholarpedia):

Yuri Aleksandrovich Kuznetsov (b. in Alma-Ata, USSR, September 8, 1957) received graduate degree in theoretical physics from the Rostov-on-Don State University, USSR, in 1979, and the Ph.D. in physics and mathematics from the Institute of Biophysics, USSR Academy of Sciences, Pushchino, Moscow Region, in 1986. From 1979, he was affiliated with the Research Computing Center (RCC; currently: Institute of Mathematical Problems of Biology), USSR /Russian Academy of Sciences, Pushchino, where he held different positions, including that of Senior Researcher from 1998 until recently. During 1991-1998, he visited as Invited Professor/Researcher IIASA (Laxenburg, Austria), Politecnico di Milano (Italy), CWI (Amsterdam, The Netherlands), and ENS (Paris, France). Since 1999 he is affiliated with Utrecht University (The Netherlands), currently being an Associate Professor at the Department of Mathematics. His research interests include theoretical and algorithmic aspects of bifurcation theory, analytical and numerical study of nonlinear dynamical systems, and development of interactive software tools for their bifurcation analysis. With his colleagues from RCC, Yu.A. Kuznetsov was one of the first to develop numerical bifurcation methods for ODEs and to apply them to biological models. His recent works were devoted to efficient numerical continuation, and normal form analysis of bifurcations of limit cycles using bordered boundary-value problems, without computation of Poincaré maps. He is the author of a popular textbook "Elements of Applied Bifurcation Theory" (Springer-Verlag, New York; editions: 1995, 1998, and 2004) and a coauthor of widely used bifurcation software LOCBIF, AUTO, CONTENT, and MATCONT. Dr. Kuznetsov's Scholar Index is 73 (as of October 3, 2007).

Selected Publications:

Book:

Yuri A. Kuznetsov, Elements of Applied Bifurcation Theory, 2nd Edition, Springer, 1998, 591 pages
Yuri A. Kuznetsov, Elements of Applied Bifurcation Theory, 3rd Edition, Springer, 2004

Software:

E.J Doedel, A.R Champneys, T.R. Fairgrieve, Yu.A. Kuznetsov, B. Sandstede, and X.J. Wang. AUTO97 continuation and bifurcation software for ordinary differential equations, 1997, Department of Computer Science, Concordia University, Montreal, Canada. Available by anonymous ftp from [ftp.cs.concordia.ca](ftp://ftp.cs.concordia.ca/pub/doedel/auto), directory pub/doedel/auto.