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### **Short Curriculum Vitae**

Dr. Sarka Hoskova-Mayerova has been working, since 1998, as a teacher of mathematics at the Military Academy, from 2008 as associative professor the University of Defence, in 2016 she was a faculty Vice-Dean for Public Relation and Development. Sarka Hoskova-Mayerova participated on many research project focused mainly to mathematics and geographic and cartographic applications in military and crisis branches. She participated on several of them in the position of the main researcher. She is author and co-author of 120+ publications including 80+ papers and 40+ speeches, mainly in the mathematical and cartographic, geographic and geoinformatics branches. She organized, in roles of either the executive director or chairman of the program committee, more than 10 international and national conferences.

### **Main Publications**

Hofmann, A., Hoskova-Mayerova, S. Development of applications in the analysis of the natural environment (2016) APLIMAT 2016 - 15th Conference on Applied Mathematics 2016, Proceedings, pp. 467-481.

Ameri, R., Hoskova-Mayerova, S. Fuzzy continuous polygroups (2016) APLIMAT 2016 - 15th Conference on Applied Mathematics 2016, Proceedings, pp. 13-19.

Talhofer, V., Hoskova-Mayerova, S. Verification tests of mathematical model of passage through terrain (2016) APLIMAT 2016 - 15th Conference on Applied Mathematics 2016, Proceedings, pp. 1010-1025.

Ameri, R., Amiri-Bideshki, M., Saeid, A.B., Hoskova-Mayerova, S. Prime filters of hyperlattices (2016) Analele Stiintifice ale Universitatii Ovidius Constanta, Seria Matematica, 24 (2), pp. 15-26.

Talhofer, V., Hofmann, A., Hoskova-Mayerova, S. Application of fuzzy membership function in mathematical models for estimation of vehicle trafficability in terrain (2015) APLIMAT 2015 - 14th Conference on Applied Mathematics, Proceedings, pp. 711-719.

Hofmann, A., Hošková-Mayerová, Š., Talhofer, V., Kovařík, V. Creation of models for calculation of coefficients of terrain passability (2014) Quality and Quantity, 49 (4), pp. 1679-1691.

Chvalina, J., Hošková-Mayerová, Š. On certain proximities and preorderings on the transposition hypergroups of linear first-order partial differential operators (2014) *Analele Stiintifice ale Universitatii Ovidius Constanta, Seria Matematica*, 22 (1), pp. 85-103.

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Hošková-Mayerova, Š. Topological hypergroupoids (2012) *Computers and Mathematics with Applications*, 64 (9), pp. 2845-2849.

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Hoskova-Mayerova, S., Rosická, Z. Programmed learning (2012) *Procedia - Social and Behavioral Sciences*, 31, pp. 782-787.

Hošková-Mayerova, S. Operational program, education for competitive advantage - preparation of study materials for teaching in English (2011) *Procedia - Social and Behavioral Sciences*, 15, pp. 3800-3804.

Hofmann, A., Kratochvíl, V., Talhofer, V., Hošková-Mayerová, S. Radio signal source position from measured azimuths (2011) *Advances in Military Technology*, 6 (2), pp. 55-67.

Hoskova-Mayerova, S., Račková, P. Problematic examples at the entrance exams of mathematics at the University of Defence (2010) *Procedia - Social and Behavioral Sciences*, 9, pp. 348-352.

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Hošková, S., Chvalina, J., Račková, P. Noncommutative join spaces of integral operators and related hyperstructures (2006) *Advances in Military Technology*, 1 (1), pp. 7-24.

Šárka, H., Chvalina, J., Pavlína, R. Hypergroups of integral operators in connections with transformation structures (2006) *Advances in Military Technology*, 1 (2), pp. 105-118.

Hošková, Š. Proximity spaces (2003) *Sbornik*, (2), pp. 137-145.