

## References

- [1] **N. N. Krasovskii** and **A. I. Subbotin**, *Positsionnyye differentsial'nye igry* [Positional Differential Games] Nauka, Moscow, 1974.
- [2] **V. N. Ushakov**, **A. A. Uspenskii** and **A. G. Malev**, An estimate of the stability defect for a positional absorption set subjected to discriminant transformations. *Proceedings of the Steklov Institute of Mathematics*, **279**, 113–129, 2012.
- [3] **A. L. Kazakov**, **A. A. Lempert** and **D. S. Bukharov**, On segmenting logistical zones for servicing continuously developed consumers *Automation and Remote Control*, **754**, No. 6, 968–977, 2013.
- [4] **V. N. Ushakov**, **P. D. Lebedev** and **N. G. Lavrov**, Algorithms of optimal packing construction in ellipse, *Vestnik YuUrGU. Ser. Mat. Model. Progr.*, **10**, issue 3. 67–79, 2017. DOI: 10.14529/mmp170306
- [5] **P. D. Lebedev** and **A. L. Kazakov**, Iterative methods for the construction of planar packings of circles of different size, *Tr. Inst. Mat. Mekh. Ural. Otd. Ross. Akad. Nauk*, **24**, No. 2, 141–151, 2018. DOI: 10.21538/0134-4889-2018-24-2-141-151
- [6] **J. Machchhar** and **G. Elber**, Dense packing of congruent circles in free-form non-convex containers *Computer Aided Geometric Design*, **52–53**, 2017. 13–27. DOI: 10.1016/j.cagd.2017.03.006
- [7] **L. Meng**, **X. Yao**, and **Ch Wang** Non-convex shape effects on the dense random packing properties of assembled rods *Physica A: Statistical Mechanics and its Applications*, **490**. 2017. doi: 10.1016/j.physa.2017.08.026
- [8] **Subbotin A.I.** *Generalized solutions of first-order PDEs*. The dynamical optimization perspective, Boston: Birkhäuser, 1995, xi+314 p. DOI: 10.1007/978-1-4612-0847-1
- [9] **V. F. Dem'yanov** and **L. V. Vasil'ev**, *Nedifferentsiruemaya optimizatsiya* [Non-differentiable optimization], Moscow: Nauka, 1981, 384 p.
- [10] **R. Rockafellar**. *Convex Analysis*. Princeton Univ., Princeton, 1970.
- [11] **P. D. Lebedev** and **A. V. Ushakov**, Approximating sets on a plane with optimal sets of circles *Automation and Remote Control*, **73**, Issue 3, 485–493, 2012. doi: 10.1134/S0005117912030071
- [12] **A. G. Sukharev**, **A. V. Timokhov** and **V. V. Fedorov**, *Kurs metodov optimizatsii* [A course in optimization methods], Moscow: Nauka, 1986. 326 p.
- [13] **E. A. Nurminskii** and **D. Tien**, Method of conjugate subgradients with constrained memory *Autom. Remote Control*, **75**, No 4, 646–656, 2014, doi 10.1134/S0005117914040055
- [14] **E. A Vorontsova**, Linear tolerance problem for the interval model of interindustry balance *Vychislitel'nyye tekhnologii* (Computing technology) **22**, No 2. 67–84, 2017.
- [15] **A. V. Gasnikov**, **P. E. Dvurechensky**, **D. I. Kamzolov**, **Y. E. Nesterov**, **V. G. Spokoiny**, **P. I. Stetsyuk**, **A. L. Suvorikova** and **A. V. Chernov**, Search for equilibriums in multi-stage transport models *Trudy MFTI*, [Proceedings of MIPT] **7**, No 4, 143–155. 2015.
- [16] **P. D. Lebedev**, *The program for calculating the optimal coverage of a hemisphere by a set of spherical segments*, The certificate of state registration, no. 2015661543, 29.10.2015.
- [17] **L. F. Tóth**, *Lagerungen in der Ebene, auf der Kugel und im Raum*, Berlin: Springer, 1953, x+198 p. [German]. DOI: 10.1007/978-3-662-01206-2
- [18] **L. M. Mestetskiy**, *Nepreryvnaya morfologiya binarnykh izobrazheniy. Figury, skelety, tsyrkul'yary* [Continuous morphology of binary images. Figures, skeletons, circular]. Fismatlit, Moscow, 2009.

- [19] **P. D. Lebedev** and **A. A. Uspenskii**, Construction of a nonsmooth solution in a time-optimal problem with a low order of smoothness of the boundary of the target set, *Trudy Instituta Matematiki i Mekhaniki UrO RAN*, [Proceedings of the Institute of Mathematics and Mechanics]. **25**, No. 1, 108–119. 2019,
- [20] **A. A. Savelov**, *Ploskiye krivyye. Sistematika, svoystva, primeneniya*. [Flat curves. Systematics, properties, applications.] Librocom, Moscow. 2010.
- [21] **E. Specht**, *Packomania*. [www.packomania.com](http://www.packomania.com)