

## LIST OF PUBLICATIONS

Dr. rer. nat. habil. Margarita Spirova

### 1. Papers in scientific journals

1. J. ALONSO, M. SPIROVA: Characterizations of different classes of convex bodies via orthogonality, *Bull. Belg. Math. Soc. Simon Stevin*, 16 pp., to appear.
2. H. MARTINI, M. SPIROVA: On universal covers in normed planes, *Adv. Geom.*, 10 pp., to appear.
3. M. SPIROVA: On Miquel's theorem and inversions in normed planes, *Monatsh. Math.* **161** (2010), 335–345.  
MR2726217
4. M. SPIROVA: Circle configurations in strictly convex normed planes, *Adv. Geom.* **10** (2010), 631–646.  
MR2733957
5. H. MARTINI, M. SPIROVA: A new type of orthogonality in normed planes, *Czechoslovak Math. J.* **60** (2010), 339–349.  
MR2657953
6. J. ALONSO, H. MARTINI, M. SPIROVA: Visibility in crowds of translates of a centrally symmetric body, *European J. Combin.* **31** (2010), 710–719.  
MR2587023
7. M. SPIROVA: On a theorem of G. D. Chakerian, *Contrib. Discrete Math.* **5** (2010), 107–118.  
MR2630074
8. H. MARTINI, M. SPIROVA: On the circular hull property in normed planes, *Acta Math. Hungar.* **125** (2009), 275–285.  
MR 2557036

9. H. MARTINI, M. SPIROVA: Reflections in strictly convex Minkowski planes, *Aequationes Math.* **78** (2009), 71-85.  
MR2552524
10. H. MARTINI, M. SPIROVA: Covering discs in Minkowski planes, *Canad. Math. Bull.* **52** (2009), 424-434.  
MR 2547809
11. H. MARTINI, M. SPIROVA: On regular 4-coverings and their application for lattice coverings in normed planes, *Discrete Math.* **309** (2009), 5158-5168.  
MR 2548917
12. A. BORISOV, M. SPIROVA: On the measurability of sets of pairs of intersecting non-isotropic straight lines of type beta in the simply isotropic space, *Acta Univ. Palack. Olomuc.* **48** (2009), 7-16.  
MR2641943
13. M. SPIROVA: Propellers in affine Cayley-Klein planes, *J. Geom.* **93** (2009), 164-177.  
MR 2501216
14. H. MARTINI, M. SPIROVA: Circle geometry in affine Cayley-Klein planes, *Periodica Math. Hungar.* **57** (2008), 197-206.  
MR 2469605
15. M. HAJJA, M. SPIROVA: A new line associated with the triangle, *Elem. Math.* **63** (2008), 165-172.  
MR 2453140
16. M. HAJJA, H. MARTINI, M. SPIROVA: New extension of Napoleon's theorem to higher dimensions, *Beiträge Algebra Geom.* **49** (2008), 253-264.  
MR 2410581
17. H. MARTINI, M. SPIROVA: Clifford's chain of theorems in strictly convex Minkowski planes, *Publ. Math. Debrecen* **72** (2008), 371-383.  
MR 2406927
18. H. MARTINI, M. SPIROVA: The Feuerbach circle and orthocentricity in normed planes, *Enseign. Math.* **53** (2007), 237-258.  
MR2455944

19. M. SPIROVA: On the Napoleon-Torricelli configuration in affine Cayley-Klein planes, *Abh. Math. Sem. Univ. Hamburg* **76** (2006), 131-142.  
MR 2293438
20. M. HAJJA, H. MARTINI, M. SPIROVA: On converses of Napoleon's theorem and a modified shape function, *Beiträge Algebra Geom.* **47** (2006), no. 2, 363-383.  
MR 2307909
21. H. MARTINI, M. SPIROVA: On Napoleon's theorem in the isotropic plane, *Periodica Math. Hungar.* **53** (2006), 199-208.  
MR 2286471
22. A. BORISOV, M. SPIROVA: Crofton formulas relating sets of pairs of intersecting non-isotropic straight lines in the simply isotropic space, *Tensor* **67** (2006), no. 3, 243-253.  
MR2361199
23. M. SPIROVA: Miquel triangles in the isotropic plane. *Tensor* **67** (2006), no. 3, 235-242.  
MR 2361198
24. M. SPIROVA: On Brocard points in the isotropic plane, *Beiträge Algebra Geom.* **47** (2006), no. 1, 167-174.  
MR 2246532
25. H. MARTINI, M. SPIROVA: On similar triangles in the isotropic plane, *Revue Roumaine Math. Pures Appl.* **51** (2006), no. 1, 57-64.  
MR 2275318
26. M. HAJJA, M. SPIROVA: A characterization of the centroid using June Lester's shape function, *Forum Geom.* **6** (2006), 53-55.  
MR 2226377
27. A. V. BORISOV, M. G. SPIROVA: Measurability of Sets of Pairs of Skew Non-isotropic Straight Lines in the Simply Isotropic Space I, *Mathematica Balkanica*, **18** (2004), 95-103.  
MR 2076081
28. A. V. BORISOV, M. G. SPIROVA: Measurability of Sets of Pairs of Skew Non-isotropic Straight Lines in the Simply Isotropic Space II, *Mathematica Balkanica*, **18** (2004), 105-113.  
MR 2076082

29. A. V. BORISOV, M. G. SPIROVA: Measurability of Sets of Pairs of Planes in the Simply Isotropic Space, *Mathematica Balkanica* **17** (2003), 291-305.  
MR 2035864
30. A. BORISOV, M. SPIROVA: Some integral geometric results in the simply isotropic space, *J. Geom.* **77** (2003), 8-21.  
MR 2000850

## 2. Papers in conference proceedings

31. M. SPIROVA, A. BORISOV: On the measurability of sets of pairs of straight lines in the simply isotropic space, *PDEs, Submanifolds and affine differential geometry, Banach Center Publ.* **69**, Polish Acad. Sci., Warsaw, 2005, 243-256. MR 2189571
32. A. V. BORISOV, M. G. SPIROVA: Measurability of sets of pairs of skew non-isotropic and isotropic straight lines in the simply isotropic space, *Math. and Educ. in Math.*, Proc. XXXIII Spr. Conf. UBM, Borovets, April 1-4, 2004, 108-113. MR 2081571
33. M. G. SPIROVA, A. V. BORISOV: Measurability of sets of pairs of intersecting nonisotropic and isotropic straight lines in the simply isotropic space, *Math. and Educ. in Math.*, Proc. XXXIII Spr. Conf. UBM, Borovets, April 1-4, 2004, 171-175. MR 2081982
34. A. V. BORISOV, M. G. SPIROVA: Some similar triangles associated with a pure triangle in the Galilean plane, *Math. and Educ. in Math.*, Proc. XXXII Spr. Conf. UBM, Sunny Beach, April 5-8, 2003, 138-143. MR 2006141
35. A. V. BORISOV, M. G. SPIROVA: Measurability of sets of pairs of points in the simply isotropic space, *Math. and Educ. in Math.*, Proc. XXXII Spr. Conf. UBM, Sunny Beach, April 5-8, 2003, 144-149. MR 2006140

## 3. Popular science publications and surveys

36. H. MARTINI, M. SPIROVA, K. SWANEPOEL: Geometry where directions matters - or does it? *Math. Intelligencer* **33**, no. 4 (2011), to appear.
37. H. MARTINI, M. SPIROVA: Regular tessellations in normed planes, *Symmetry Cult. Sci.* **22** (2011), 223-235.

- 38. H. MARTINI, M. SPIROVA: Golden rectangles in normed planes, *Mitt. Math. Ges. Hamburg* **29** (2010), 125–134.
- 39. M. SPIROVA: Reconstruction of 3D objects using perspective. *Multisensor Signal, Image and Data Processing*, In: Proc. of the Workshop in the frame of 3rd Balkan Conference in Informatics, Sofia, Bulgaria, September 27-29, 2007, 69-76.
- 40. H. MARTINI, M. SPIROVA: Recent results in Minkowski geometry. In: Proc. Internat. Conf. Math. Appl. (Mahidol University of Bangkok, Thailand, 2007), Mahidol University Press, Bangkok, 2007, pp. 45-83. (It also appeared in a special volume of the *East-West J. Math.* (2007), 59-101.)  
MR 2494900

#### 4. Submitted papers

- 41. H. MARTINI, M. SPIROVA, K. STRAMBACH: Group-theoretical conditions in strictly convex Minkowski planes, 16 pp., submitted
- 42. J. ALONSO, H. MARTINI, M. SPIROVA: Minimal enclosing discs, (minimal) circumcircles, and circumcenters in normed planes (Part I), 24 pp., submitted.
- 43. J. ALONSO, H. MARTINI, M. SPIROVA: Minimal enclosing discs, (minimal) circumcircles, and circumcenters in normed planes (Part II), 21 pp., to be submitted.
- 44. M. LASSAK, H. MARTINI, M. SPIROVA: Translative covering number, 10 pp., to be submitted.

#### 5. Books

- 45. M. SPIROVA: *Discrete Geometry in Normed Spaces*, Südwestdeutscher Verlag für Hochschulschriften, Saarbrücken, 2011.