Publications of Luis Mariano Peñaranda

All publications, classified by type, are listed here. Drafts and reports published later were omitted. Usually, authors are specified in alphabetical order in the publications related to Computational Geometry.

Articles in refereed international journals

[1] L. Peñaranda, L. Velho, and L. Sacht. Real-time correction of panoramic images using hyperbolic Möbius transformations. *Journal of Real-Time Image Processing*, 15(4):725–738, Springer, 2018. http://dx.doi.org/10.1007/s11554-015-0502-x.

[2] V. Fisikopoulos and L. Peñaranda. Faster geometric algorithms via dynamic determinant computation. *Computational Geometry: Theory and Applications*, 54:1–16, Elsevier, Apr. 2016. http://dx.doi.org/10.1016/j.comgeo.2015.12.001.

[3] I. Emiris, V. Fisikopoulos, C. Konaxis, and L. Peñaranda. An oracle-based, output-sensitive algorithm for projections of resultant polytopes. *International Journal of Computational Geometry & Applications (special issue of invited papers from SoCG'12)*, 23(4n5):397–423, World Scientific, 2013. http://dx.doi.org/10.1142/S0218195913600108.

[4] J. Cheng, S. Lazard, L. Peñaranda, M. Pouget, F. Rouillier, and E. Tsigaridas. On the topology of real algebraic plane curves. *Mathematics in Computer Science (special issue on Computational Geometry and Computer Aided Geometric Design)*, 4(1):113–137, Birkhäuser, 2010. http://dx.doi.org/10.1007/s11786-010-0044-3.

[5] S. Lazard, L. Peñaranda, and S. Petitjean. Intersecting quadrics: an efficient and exact implementation. *Computational Geometry: Theory and Applications (special issue of invited papers from SoCG'04)*, 35(1-2):74–99, Elsevier, 2006. http://dx.doi.org/10.1016/j.comgeo.2005.10.004.

[6] L. Gómez, C. Gazza, H. Dacharry, L. Peñaranda, and A. Dobry. Pressure dependence of the melting mechanism at the limit of overheating in Lennard-Jones crystals. *Physical Review B*, 71(13):134106, American Physical Society, Apr. 2005. http://dx.doi.org/10.1103/PhysRevB.71.134106.

Publications in selective international conferences

[7] E. Biagioli, F. Bergero, R. Imbuzeiro Oliveira, and L. Peñaranda. Applying root-finding techniques to extend quantized-state-systems-based solvers. In *XLII Latin American Computing Conference, CLEI 2016*, pages 1–9, Valparaíso, Chile, Oct. 2016. IEEE. http://dx.doi.org/10.1109/CLEI.2016.7833372.

[8] V. Fisikopoulos and L. Peñaranda. Faster geometric algorithms via dynamic determinant computation. In *Proceedings of the 20th European Symposium on Algorithms, ESA 2012*, volume 7501 of *Lecture Notes in Computer Science*, pages 443–454, Ljubljana, Slovenia, Sept. 2012. Springer. http://dx.doi.org/10.1007/978-3-642-33090-2_39.

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[10] J. Cheng, S. Lazard, L. Peñaranda, M. Pouget, F. Rouillier, and E. Tsigaridas. On the topology of planar algebraic curves. In *Proceedings of the 25th Symposium on Computational Geometry*, pages 361–370, Aarhus, Denmark, June 2009. ACM. http://dx.doi.org/10.1145/1542362.1542424.

[11] S. Lazard, L. Peñaranda, and E. Tsigaridas. Univariate algebraic kernel and application to arrangements. In *Proceedings of the 8th International Symposium on Experimental Algorithms, SEA 2009*, volume 5526 of *Lecture Notes in Computer Science*, pages 209–220, Dortmund, Germany, June 2009. Springer. http://dx.doi.org/10.1007/978-3-642-02011-7_20.

[12] S. Lazard, L. Peñaranda, and S. Petitjean. Intersecting quadrics: an efficient and exact implementation. In *Proceedings of the 20th Symposium on Computational Geometry*, pages 419–428, Brooklyn, NY, USA, June 2004. ACM. http://dx.doi.org/10.1145/997817.997880.

Publications in other international conferences and workshops

[13] E. Biagioli, L. Peñaranda, and R. Imbuzeiro Oliveira. New method for bounding the roots of a univariate polynomial. In *28th Conference of Patterns, Graphics and Images, Workshop of Works in Progress*, Salvador, Brazil, Aug. 2015.

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Doctoral dissertations

[17] L. Peñaranda. *Non-linear computational geometry for planar algebraic curves*. PhD thesis, Nancy Université, Nancy, France, Dec. 2010.

[18] L. Peñaranda. Testing programs with arrays using the SSA form. Argentinean BsC thesis (equivalent of French MsC thesis), Universidad Nacional de Rosario, Rosario, Argentina, Feb. 2006. In Spanish.