A Bibliography of Publications of Jörg Peters

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Abstract

This bibliography records publications of Jörg Peters.

Title word cross-reference

$(3,5)$ [Pet02a]. 2 [NKP16]. 3 [NKP16, Pet90a, PS04, PSZF06]. 4 [PS04]. A [KP15d]. C^1 [KP15c, NKP16, NP16b, Pet90b, NP92, PS92b, Pet95b, PS92a, Pet95c]. C^2 [KP05, KP09b, KP18a, KP18b, KP19a, MP09, Pet89, Pet02a, Pet96a, Pet95a]. C^k [GP15, Pet92b]. G [SP16]. G^1 [ASC18, KP17, Pet18, Pet92a]. G^2 [HPS12, KP11a, KP11b, KP15a, KP16]. G^k [GP15]. m [PS92a]. $\mathcal{A}_n^*$ [KP10]. T [KP19b].

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References

Akleman:2018:RT

[ASC18] Ergun Akleman, Vinod Srinivasan, and Jianer Chen. Response to “On G^1 stitched bi-cubic Bézier patches with arbitrary topology”. *Computers and Graphics*, 71(??):157–158, April 2018. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0097849317301954`. See [Pet18].

Bebis:2008:AVCa

[BBP+08] George Bebis, Richard Boyle, Bahram Parvin, Darko Koracin, Paolo Remagnino, Fatih Porikli, Jörg Peters, James Klosowski, Laura Arns, Yu Ka Chun, Theresa-Marie Rhyne, and Laura Monroe, editors. *Advances in Visual Computing: 4th International Symposium, ISVC 2008, Las Vegas, NV, USA, December 1–3, 2008. Proceedings, Part I*, volume 5358 of *Lecture Notes in Computer Science*. Springer-Verlag Inc., New York, NY, USA, 2008. CODEN LNCSD9. ISBN 3-540-89638-4 (print), 3-540-89639-2 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN ???? URL `http://www.springerlink.com/content/978-3-540-89639-5`.

Biasotti:2022:FSIc

[BMP22] Silvia Biasotti, Ramanathan Muthuganapathy, and Jörg Peters. Foreword to the special issue on shape modeling international 2022 (SMI2022). *Computers and Graphics*, 107(??): A6–A8, October 2022. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0097849322001613`.

Boehm:1995:GCG

[BPP95] W. Boehm, H. Prautzsch, and Jörg Peters. Geometric concepts for geometric design. *SIAM Review*, 37(3):473–??, September 1995. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Braess:1992:NMA

[BS92] D. Braess and L. L. Schumaker, editors. *Numerical methods in approximation theory, Volume 9*, volume 105 of *International series of numerical mathematics*. Birkhäuser, Cambridge, MA, USA; Berlin, Germany; Basel, Switzerland, 1992. ISBN 3-7643-2746-4 (Basel), 0-8176-2746-4 (Boston). xiv + 357 pp. LCCN QA221 .N84 1992.

Daehlen:1994:MMC

[DLS94] M. Dæhlen, T. Lyche, and L. L. Schumaker, editors. *Mathematical methods in computer aided geometric design III*. Vanderbilt University Press, Nashville, TN, USA, 1994. ISBN 0-8265-1268-2. LCCN QA565 .M37 1995.

Daehlen:1998:MMC

[DLS98] Morten Dæhlen, Tom Lyche, and Larry L. Schumaker, editors. *Mathematical Methods for Curves and Surfaces II: Lillehammer, 1997*. Vanderbilt University Press, Nashville, TN, USA,

1998. ISBN 0-8265-1315-8. LCCN QA565 .M372 1998.

Farin:1997:XX

[Far97] G. Farin, editor. *XXX*. Springer-Verlag, Berlin, 1997.

Farin:1998:GMD

[FBBD98] Gerald Farin, Hanspeter Bieri, Guido Brunnett, and Tony DeRose, editors. *Geometric modelling. 3rd Dagstuhl workshop, Dagstuhl, Germany, 1996*, volume 13 of *Computing. Supplementum*. Springer, Wien / New York, 1998. CODEN COSPDM. ISBN 3-211-83207-6. ISSN 0344-8029. LCCN QA565 .G452 1998. URL `http://www.springer.at/springer.py?Page=30&Key=340&id=589&cat=3`.

Farouki:1996:SCD

[FP96] R. Farouki and J. Peters. Smooth curve design with double-Tschirnhaus cubics. *Annals of Numerical Mathematics*, 3(??), ???? 1996. ISSN 1021-2655.

Grandine:2012:SIS

[GHPW12] Thomas Grandine, Stefanie Hahmann, Jörg Peters, and Wenping Wang. Special issue of selected papers from the 8th Dagstuhl seminar on Geometric Modeling. *Graphical models*, 74 (6):291, November 2012. CODEN GRMOFM. ISSN 1524-0703 (print), 1524-0711 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S1524070312000422`.

Goodman:1997:MS

[GM97] Tim N. T. Goodman and Ralph R. Martin, editors. *The Mathematics of surfaces VII: Proceedings of the Mathematics of Surfaces VII Conference, Dundee, UK, September 1996*. Information Geometers, Winchester, UK, 1997. ISBN 1-874728-12-7.

Gonzalez-Ochoa:1998:CMO

[GOMP98] Carlos Gonzalez-Ochoa, Scott McCammon, and Jörg Peters. Computing moments of objects enclosed by piecewise polynomial surfaces. *ACM Transactions on Graphics*, 17(3):143–157, July 1998. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic). URL `http://www.acm.org/pubs/citations/journals/tog/1998-17-3/p143-gonzalez-ochoa/`.

Gonzalez:1997:IMU

[Gon97] C. Gonzalez. Interactive modeling using surface splines. In *1er Encuentro de Computacion, ENC 97*, page ?? Sociedad Mexicana de Ciencia de la Computacion, 1997. Queretaro, Mexico.

Goodman:1995:BNC

[GP95] T. N. T. Goodman and J. Peters. Bézier nets, convexity and subdivision on higher dimensional simplices. *Computer-Aided Geometric Design*, 12:53–65, 1995. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Gonzalez:1998:TH

[GP98] C. Gonzalez and J. Peters. The topological house, 1998. URL http://www-sfb288.math.tu-berlin.de/VideoMath/program/page27.html. Videotape.

Groisser:2015:MCA

[GP15] David Groisser and Jörg Peters. Matched G^k-constructions always yield C^k-continuous isogeometric elements. *Computer-Aided Geometric Design*, 34:67–72, 2015. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Goldman:1998:EMD

[GTP98] A. Goldman, D. Trystram, and J. Peters. Exchange of messages of different sizes. *Lecture Notes in Computer Science*, 1457: 194–??, 1998. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic).

Herrmann:1994:MLS

[HAPR94] J. Herrmann, R. Ackermann, J. Peters, and D. Reipa. A multistrategy learning system and its integration into an interactive floorplanning tool. *Lecture Notes in Computer Science*, 784: 138–??, 1994. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic).

Hahmann:2009:ESI

[HFPW09] Stefanie Hahmann, Gerald Farin, Jörg Peters, and Wenping Wang. Editorial: Special issue on geometric modeling (Dagstuhl 2008). *Computing*, 86(2–3): 71–72, October 2009. CODEN CMPTA2. ISSN 0010-485X (print), 1436-5057 (electronic). URL http://www.springerlink.com/openurl.asp?genre=article&issn=0010-485X&volume=86&issue=2&spage=71.

Hoffmann:1994:GCC

[HP94] C. M. Hoffmann and J. Peters. Geometric constraints of CAGD. In Dæhlen et al. [DLS94], pages 369–376. ISBN 0-8265-1268-2. LCCN QA565 .M37 1995.

Hermann:2012:CNC

[HPS12] Thomas Hermann, Jörg Peters, and Tim Strotman. Curve networks compatible with G^2 surfacing. *Computer-Aided Geometric Design*, 29(5):219–230, 2012. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Kim:2008:BSR

[KEP08] Minho Kim, Alireza Entezari, and Jörg Peters. Box spline reconstruction on the face-centered cubic lattice. *IEEE Transactions on Visualization and Computer Graphics*, 14(6):1523–1530, November/December 2008. CODEN ITVGEA. ISSN 1077-2626 (print), 1941-0506 (electronic), 2160-9306.

Karciauskas:2005:PSS

[KP05] Kęstutis Karčiauskas and Jörg Peters. Polynomial C^2 spline surfaces guided by rational multisided patches. In *Computational methods for algebraic spline sur-*

faces, pages 119–134. Springer-Verlag Inc., New York, NY, USA, 2005.

Karciauskas:2007:BPS

[KP07] Kęstutis Karčiauskas and Jörg Peters. Bicubic polar subdivision. *ACM Transactions on Graphics*, 26(4):14:1–14:6, October 2007. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic).

Karciauskas:2009:ACC

[KP09a] Keştutis Karciauskas and Jörg Peters. Assembling curvature continuous surfaces from triangular patches. *Computers and Graphics*, 33(3):204–210, June 2009. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0097849309000302`.

Karciauskas:2009:LSS

[KP09b] Kestutis Karciauskas and Jörg Peters. Lens-shaped surfaces and C^2 subdivision. *Computing*, 86(2–3):171–183, October 2009. CODEN CMPTA2. ISSN 0010-485X (print), 1436-5057 (electronic). URL `http://www.springerlink.com/openurl.asp?genre=article&issn=0010-485X&volume=86&issue=2&spage=171`.

Kim:2009:FSE

[KP09c] Minho Kim and Jörg Peters. Fast and stable evaluation of box-splines via the BB-form. *Numerical Algorithms*, 50(4):381–399, April 2009. CODEN NUALEG. ISSN 1017-1398 (print), 1572-9265 (electronic). URL `http://www.springerlink.com/openurl.asp?genre=article&issn=1017-1398&volume=50&issue=4&spage=381`.

Kim:2010:SBS

[KP10] Minho Kim and Jörg Peters. Symmetric box-splines on the $\mathcal{A}_n^*$ lattice. *Journal of Approximation Theory*, 162(9):1607–1630, 2010. CODEN JAXTAZ. ISSN 0021-9045 (print), 1096-0430 (electronic).

Karciauskas:2011:RS

[KP11a] Kęstutis Karčiauskas and Jörg Peters. Rational G^2 splines. *Graphical models*, 73(5):286–295, September 2011. CODEN GRMOFM. ISSN 1524-0703 (print), 1524-0711 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S152407031100021X`.

Karciauskas:2011:SRB

[KP11b] Kęstutis Karčiauskas and Jörg Peters. Section 1: Rational bicubic G^2 splines for design with basic shapes. *Computer Graphics Forum*, 30(5):1389–1395, August 2011. CODEN CGFODY. ISSN 0167-7055 (print), 1467-8659 (electronic).

Kim:2011:SBS

[KP11c] Minho Kim and Jörg Peters. Symmetric box-splines on root lattices. *Journal of Computational and Applied Mathematics*, 235(14):3972–3989, 2011. CO-

DEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic).

Karciauskas:2012:CAC

[KP12a] Kęstutis Karčiauskas and Jörg Peters. Curvature of approximating curve subdivision schemes. In *Curves and surfaces*, volume 6920 of *Lecture Notes in Computer Science*, pages 369–381. Springer-Verlag Inc., New York, NY, USA, 2012.

Karciauskas:2012:FFS

[KP12b] Keştutis Karciauskas and Jörg Peters. Free-form splines combining NURBS and basic shapes. *Graphical models*, 74(6):351–360, November 2012. CODEN GRMOFM. ISSN 1524-0703 (print), 1524-0711 (electronic). URL http://www.sciencedirect.com/science/article/pii/S1524070312000379.

Karciauskas:2013:CSS

[KP13a] Kęstutis Karčiauskas and Jörg Peters. Curvature-sensitive splines and design with basic curves. *Computer-Aided Design*, 45(2): 415–423, 2013. CODEN CAIDA5. ISSN 0010-4485 (print), 1879-2685 (electronic).

Karciauskas:2013:NUI

[KP13b] Kęstutis Karčiauskas and Jörg Peters. Non-uniform interpolatory subdivision via splines. *Journal of Computational and Applied Mathematics*, 240:31–41, 2013. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic).

Karciauskas:2014:NUI

[KP14] Kęstutis Karčiauskas and Jörg Peters. Non-uniform interpolatory subdivision based on local interpolants of minimal degree. In *Mathematical methods for curves and surfaces*, volume 8177 of *Lecture Notes in Computer Science*, pages 248–264. Springer-Verlag Inc., New York, NY, USA, 2014.

Karciauskas:2015:BSF

[KP15a] Kęstutis Karčiauskas and Jörg Peters. Biquintic G^2 surfaces via functionals. *Computer-Aided Geometric Design*, 33:17–29, 2015. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Karciauskas:2015:ISM

[KP15b] Kęstutis Karciauskas and Jörg Peters. Improved shape for multi-surface blends. *Graphical models*, 82(??):87–98, November 2015. CODEN GRMOFM. ISSN 1524-0703 (print), 1524-0711 (electronic). URL http://www.sciencedirect.com/science/article/pii/S1524070315000259.

Karciauskas:2015:PAB

[KP15c] Keştutis Karciauskas and Jörg Peters. Point-augmented biquadratic C^1 subdivision surfaces. *Graphical models*, 77 (??):18–26, January 2015. CODEN GRMOFM. ISSN 1524-0703 (print), 1524-0711 (electronic). URL http://www.sciencedirect.com/science/article/pii/S152407031400054X.

Karciauskas:2015:QPC

[KP15d] KĘstutis Karčiauskas and Jörg Peters. Quads and polygons: Can bi-cubic surfaces be class A? *Computer Graphics Forum*, 34(5):229–238, August 2015. CODEN CGFODY. ISSN 0167-7055 (print), 1467-8659 (electronic).

Karciauskas:2015:SMS

[KP15e] Kęstutis Karciauskas and Jörg Peters. Smooth multi-sided blending of biquadratic splines. *Computers and Graphics*, 46(??): 172–185, February 2015. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0097849314000922`.

Karciauskas:2016:MBC

[KP16] Kęstutis Karčiauskas and Jörg Peters. Minimal bi-6 G^2 completion of bicubic spline surfaces. *Computer-Aided Geometric Design*, 41:10–22, 2016. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Karciauskas:2017:RFF

[KP17] Kęstutis Karčiauskas and Jörg Peters. Refinable G^1 functions on G^1 free-form surfaces. *Computer-Aided Geometric Design*, 54:61–73, 2017. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Karciauskas:2018:NCG

[KP18a] Kęstutis Karčiauskas and Jörg Peters. A new class of guided C^2 subdivision surfaces combining good shape with nested refinement. *Computer Graphics Forum*, 37(6):84–95, September 2018. CODEN CGFODY. ISSN 0167-7055 (print), 1467-8659 (electronic).

Karciauskas:2018:RCS

[KP18b] Kęstutis Karciauskas and Jörg Peters. Rapidly contracting subdivision yields finite, effectively C^2 surfaces. *Computers and Graphics*, 74(??):182–190, August 2018. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0097849318300839`.

Karciauskas:2019:FFF

[KP19a] Kęstutis Karciauskas and Jörg Peters. Fair free-form surfaces that are almost everywhere parametrically C^2. *Journal of Computational and Applied Mathematics*, 349(??):470–481, March 15, 2019. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0377042718304667`.

Karciauskas:2019:RSS

[KP19b] Kęstutis Karciauskas and Jörg Peters. Refinable smooth surfaces for locally quad-dominant meshes with T-gons. *Computers and Graphics*, 82(??):193–202, August 2019. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL `http://www.`

sciencedirect.com/science/article/pii/S0097849319300743.

Karciauskas:2022:IRR

[KP22a] Kęstutis Karciauskas and Jörg Peters. An improved refinement rule for multi-sided faces. *Computers and Graphics*, 102(??): 370–379, February 2022. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0097849321002193.

Karciauskas:2022:LRP

[KP22b] Kęstutis Karciauskas and Jörg Peters. Localized remeshing for polyhedral splines. *Computers and Graphics*, 106(??): 58–65, August 2022. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0097849322000905.

Karciauskas:2023:QAS

[KP23] K. Karčiauskas and J. Peters. Quadratic-attraction subdivision. *Computer Graphics Forum*, 42(5): e14900:1–e14900:??, August 2023. CODEN CGFODY. ISSN 0167-7055 (print), 1467-8659 (electronic).

Kim:2024:PBS

[KP24] Minho Kim and Jörg Peters. A practical box spline compendium. *Applied Mathematics and Computation*, 464(??):??, March 1, 2024. CODEN AMHCBQ. ISSN 0096-3003 (print), 1873-5649 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0096300323005453.

Karciauskas:2017:JSS

[KPP17] Kęstutis Karciauskas, Daniele Panozzo, and Jörg Peters. T-junctions in spline surfaces. *ACM Transactions on Graphics*, 36(5): 170:1–170:??, October 2017. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic).

Karciauskas:2004:SCS

[KPR04] K. Karčiauskas, Jörg Peters, and U. Reif. Shape characterization of subdivision surfaces—case studies. *Computer-Aided Geometric Design*, 21(6):601–614, 2004. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Lutterkort:2001:ORE

[LP01a] David Lutterkort and Jörg Peters. Optimized refinable enclosures of multivariate polynomial pieces. *Computer-Aided Geometric Design*, 18(9):851–863, 2001. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Lutterkort:2001:TLE

[LP01b] David Lutterkort and Jörg Peters. Tight linear envelopes for splines. *Numerische Mathematik*, 89(4):735–748, October 2001. CODEN NUMMA7. ISSN 0029-599X (print), 0945-3245 (electronic). URL http://link.springer-ny.com/link/service/journals/00211/bibs/1089004/10890735.htm; http://link.springer-ny.com/link/

service/journals/00211/papers/1089004/10890735.pdf.

MacKay:1991:GIC

[MK91] S. MacKay and E. M. Kidd, editors. *Graphics Interface '91, Calgary, Alberta, 3–7 June 1991: proceedings*. Canadian Information Processing Society, 243 College St, 5th Floor, Toronto, Ontario M5T 2Y1, Canada, 1991. ISBN 0-9695338-0-2. LCCN T385.P792 1991.

Myles:2008:PBC

[MKP08] Ashish Myles, Kęstutis Karčiauskas, and Jörg Peters. Pairs of bi-cubic surface constructions supporting polar connectivity. *Computer-Aided Geometric Design*, 25(8):621–630, 2008. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Myles:2008:SSF

[MNP08] A. Myles, T. Ni, and J. Peters. Smooth surfaces: Fast parallel construction of smooth surfaces from meshes with tri/quad/pent facets. *Computer Graphics Forum*, 27(5):1365–1372, July 2008. CODEN CGFODY. ISSN 0167-7055 (print), 1467-8659 (electronic).

Myles:2009:BCP

[MP09] Ashish Myles and Jörg Peters. Bi-3 C^2 polar subdivision. *ACM Transactions on Graphics*, 28(3): 48:1–48:??, August 2009. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic).

Mishra:2023:PCN

[MP23] Bhaskar Mishra and Jörg Peters. Polyhedral control-net splines for analysis. *Computers and Mathematics with Applications*, 151 (??):215–221, December 1, 2023. CODEN CMAPDK. ISSN 0898-1221 (print), 1873-7668 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0898122123004261.

Mullineux:1996:MS

[Mul96] Glen Mullineux, editor. *The Mathematics of surfaces VI: based on the proceedings of a conference organized by the Institute of Mathematics and Its Applications on the mathematics of surfaces, held at Brunel University in September 1994*. Clarendon Press, New York, NY, USA, 1996. ISBN 0-19-851198-1. LCCN QA571.M3853 1996.

Nguyen:2016:FEN

[NKP16] Thien Nguyen, Kęstutis Karciauskas, and Jörg Peters. C^1 finite elements on non-tensor-product 2 d and 3 d manifolds. *Applied Mathematics and Computation*, 272 (part 1)(??):148–158, January 1, 2016. CODEN AMHCBQ. ISSN 0096-3003 (print), 1873-5649 (electronic). URL http://www.sciencedirect.com/science/article/pii/S009630031500884X.

Ni:2007:TSQ

[NNP07] Tianyun Ni, Ahmad H. Nasri, and Jörg Peters. Ternary subdivision for quadrilateral meshes.

Computer-Aided Geometric Design, 24(6):361–370, 2007. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:1992:IHD

[NP92] A. Neff and J. Peters. C^1 interpolation on higher-dimensional analogues of the 4-direction mesh. In Braess and Schumaker [BS92], pages 207–220. ISBN 3-7643-2746-4 (Basel), 0-8176-2746-4 (Boston). LCCN QA221 .N84 1992.

Nguyen:2016:NDG

[NP16a] Dang-Manh Nguyen and Jörg Peters. Nonuniform discontinuous Galerkin filters via shift and scale. *SIAM Journal on Numerical Analysis*, 54(3):1401–1422, ???? 2016. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Nguyen:2016:RSE

[NP16b] Thien Nguyen and Jörg Peters. Refinable C^1 spline elements for irregular quad layout. *Computer-Aided Geometric Design*, 43:123–130, 2016. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Nguyen:2017:ELD

[NP17] Dang-Manh Nguyen and Jörg Peters. Explicit least-degree boundary filters for discontinuous Galerkin. *SIAM Journal on Scientific Computing*, 39(4):A1741–A1765, ???? 2017. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Nairn:19xx:SQB

[NPLxx] D. Nairn, J. Peters, and D. Lutterkort. Sharp, quantitative bounds on the distance between a polynomial piece and its Bézier control polygon. *Computer-Aided Geometric Design*, ??(??), ?? 19xx. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Ozkan:2018:AEA

[OPB+18] Aysegul Ozkan, Rahul Prabhu, Troy Baker, James Pence, Jörg Peters, and Meera Sitharam. Algorithm 990: Efficient atlasing and search of configuration spaces of point-sets constrained by distance intervals. *ACM Transactions on Mathematical Software*, 44(4):48:1–48:30, August 2018. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL `https://dl.acm.org/citation.cfm?id=3204472`.

Olshanskii:2006:UPP

[OPR06] Maxim A. Olshanskii, Jörg Peters, and Arnold Reusken. Uniform preconditioners for a parameter dependent saddle point problem with application to generalized Stokes interface equations. *Numerische Mathematik*, 105(1):159–191, November 2006. CODEN NUMMA7. ISSN 0029-599X (print), 0945-3245 (electronic).

Peters:1989:LGH

[Pet89] Jörg Peters. Local generalized Hermite interpolation by quartic C^2 space curves. *ACM*

Transactions on Graphics, 8 (3):235–242, July 1989. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic). URL `http://www.acm.org/pubs/toc/Abstracts/0730-0301/77060.html`.

Peters:1990:FSP

[Pet90a] J. Peters. *Fitting smooth parametric surfaces to 3D data*. PhD thesis, University of Wisconsin, Madison, WI, USA, 1990. PhD thesis; see also CMS Technical Report 91-2.

Peters:1990:LCB

[Pet90b] J. Peters. Local cubic and bicubic C^1 surface interpolation with linearly varying boundary normal. *Computer-Aided Geometric Design*, 7:499–515, 1990. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:1990:LSS

[Pet90c] J. Peters. Local smooth surface interpolation: A classification. *Computer-Aided Geometric Design*, 7:191–195, 1990. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:1990:NSM

[Pet90d] J. Peters. The network simplex method on a multiprocessor. *Networks*, 20(7):845–859, 1990. CODEN NTWKAA. ISSN 0028-3045 (print), 1097-0037 (electronic).

Peters:1990:SMI

[Pet90e] J. Peters. Smooth mesh interpolation with cubic patches. *Computer Aided Design*, 22(2):109–120, 1990. CODEN CAIDA5. ISSN 0010-4485 (print), 1879-2685 (electronic).

Peters:1991:PSE

[Pet91a] J. Peters. Parametrizing singularly to enclose vertices by a smooth parametric surface. In MacKay and Kidd [MK91], pages 1–7. ISBN 0-9695338-0-2. LCCN T385.P792 1991.

Peters:1991:SIM

[Pet91b] J. Peters. Smooth interpolation of a mesh of curves. *Constructive Approximation*, 7:221–247, 1991. ISSN 0176-4276 (print), 1432-0940 (electronic). Winner of SIAM Student Paper Competition 1989.

Peters:1992:IGS

[Pet92a] J. Peters. Improving G^1 surface joins by using a composite patch. In Warren [War92], pages 345–354. ISBN 0-8194-1031-4. LCCN T385 .C874 1992.

Peters:1992:JSP

[Pet92b] J. Peters. Joining smooth patches at a vertex to form a C^k surface. *Computer-Aided Geometric Design*, 9:387–411, 1992. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:1993:SFF

[Pet93] J. Peters. Smooth free-form surfaces over irregular meshes generalizing quadratic splines. *Computer-Aided Geometric Design*, 10:347–361, 1993. CO-

DEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:1994:CCM

[Pet94a] J. Peters. A characterization of connecting maps as roots of the identity. *Curves and Surfaces in Geometric Design*, pages 369–376, 1994.

Peters:1994:SAT

[Pet94b] J. Peters. Surfaces of arbitrary topology constructed from biquadratics and bicubics. In Sapidis [Sap94], pages 277–293. ISBN 0-89871-332-3. LCCN QA567 .D47 1994.

Peters:1994:EAE

[Pet94c] Jörg Peters. Evaluation and approximate evaluation of the multivariate Bernstein–Bézier form on a regularly partitioned simplex. *ACM Transactions on Mathematical Software*, 20(4): 460–480, December 1994. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL http://www.acm.org/pubs/citations/journals/toms/1994-20-4/p460-peters/.

Peters:1995:SBZb

[Pet95a] J. Peters. C^2 surfaces built from zero sets of the 7-direction box spline. *Mathematical Methods in Curve and Surface Design*, 1995. ISBN ????

Peters:1995:BSS

[Pet95b] J. Peters. Biquartic C^1 spline surfaces over irregular meshes. *Computer Aided Design*, 27(12), December 1995. CODEN CAIDA5. ISSN 0010-4485 (print), 1879-2685 (electronic). To appear.

Peters:1995:SS

[Pet95c] Jörg Peters. C^1-surface splines. *SIAM Journal on Numerical Analysis*, 32(2):645–666, April 1995. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Peters:1995:BRB

[Pet95d] Jörg Peters. Book review: *Geometric Concepts for Geometric Design* (W. Boehm and H. Prautzsch). *SIAM Review*, 37(3): 473–474, ???? 1995. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Peters:1995:SPM

[Pet95e] Jörg Peters. Smoothing polyhedra made easy. *ACM Transactions on Graphics*, 14(2):162–170, April 1995. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic). URL http://www.acm.org/pubs/toc/Abstracts/0730-0301/221670.html.

Peters:1995:SBZa

[Pet96a] J. Peters. C^2 surfaces built from zero sets of the 7-direction box spline. In Mullineux [Mul96], pages 463–474. ISBN 0-19-851198-1. LCCN QA571.M3853 1996.

Peters:1996:CCS

[Pet96b] J. Peters. Curvature continuous spline surfaces over irregular meshes. *Computer-Aided Geometric Design*, 13(??), ???? 1996. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic). To appear.

Peters:1996:IRC

[Pet96c] Jörg Peters. Interpolation regions for convex cubic curve segments. *Advances in computational mathematics*, 6(1):87–96, December 1996. CODEN ACMHEX. ISSN 1019-7168 (print), 1572-9044 (electronic). URL `http://link.springer.com/article/10.1007/BF02127698`.

Peters:1996:SSI

[Pet96d] Jörg Peters. Spline surfaces from irregular control meshes. *Zeitschrift für Angewandte Mathematik und Mechanik*, 76(1):69–72, ?? 1996. CODEN ZAMMAX. ISSN 0044-2267 (print), 1521-4001 (electronic). Proceedings of ICIAM '95.

Peters:1997:CCM

[Pet97a] J. Peters. C code for modeling smooth free-form surfaces of arbitrary patch-layout with linearly-trimmed bicubic B-splines (NURBS). *ACM Transactions on Mathematical Software*, ??(??), ???? 1997. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). to appear.

Peters:1997:SPT

[Pet97b] J. Peters. Smoothing polyhedra using trimmed bicubic NURBS. In *xxx*. ????, ????, 1997. submitted.

Peters:1998:PSF

[Pet98a] J. Peters. Pcp2Nurb: smooth free-form surfacing with linearly-trimmed bicubic B-splines. *ACM Transactions on Mathematical Software*, x, 1998. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). to appear.

Peters:1998:SPU

[Pet98b] J. Peters. Smoothing polyhedra using trimmed bicubic patches. In Farin et al. [FBBD98], pages 211–216. CODEN COSPDM. ISBN 3-211-83207-6. ISSN 0344-8029. LCCN QA565 .G452 1998. URL `http://www.springer.at/springer.py?Page=30&Key=340&id=589&cat=3`.

Peters:1998:APF

[Pet98c] Jörg Peters. Algorithm 783: Pcp2Nurb — smooth free-form surfacing with linearly trimmed bicubic B-splines. *ACM Transactions on Mathematical Software*, 24(3):261–267, September 1998. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL `http://www.acm.org:80/pubs/citations/journals/toms/1998-24-3/p261-peters/`.

Peters:2001:SPR

[Pet01] Jörg Peters. Smooth patching of refined triangulations. *ACM Transactions on Graphics*, 20 (1):1–9, January 2001. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic). URL `http://www.acm.`

org/pubs/citations/journals/tog/2001-20-1/p1-peters/.

Peters:2002:FFS

[Pet02a] Jörg Peters. C^2 free-form surfaces of degree $(3,5)$. *Computer-Aided Geometric Design*, 19(2):113–126, 2002. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:2002:GC

[Pet02b] Jörg Peters. Geometric continuity. In *Handbook of computer aided geometric design*, pages 193–227. North-Holland, Amsterdam, 2002.

Peters:2003:SFN

[Pet03] Jörg Peters. Smoothness, fairness and the need for better multi-sided patches. In *Topics in algebraic geometry and geometric modeling*, volume 334 of *Contemp. Math.*, pages 55–64. Amer. Math. Soc., Providence, RI, 2003.

Peters:2004:MSL

[Pet04] Jörg Peters. Mid-structures linking curved and piecewise linear geometry. In *Geometric modeling and computing: Seattle 2003*, Mod. Methods Math., pages 453–468. Nashboro Press, Brentwood, TN, 2004.

Peters:2012:CV

[Pet12] Jörg Peters. Changing variables. *IEEE Computer Graphics and Applications*, 32(3):88–93, May/June 2012. CODEN ICGADZ. ISSN 0272-1716 (print), 1558-1756 (electronic).

Peters:2013:SUK

[Pet13] Jörg Peters. Splines and unsorted knot sequences. *Computer-Aided Geometric Design*, 30(7):733–741, 2013. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:2014:RSD

[Pet14] Jörg Peters. Refinability of splines derived from regular tessellations. *Computer-Aided Geometric Design*, 31(3-4):141–147, 2014. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:2015:GSF

[Pet15] Jörg Peters. General spline filters for discontinuous Galerkin solutions. *Computers and Mathematics with Applications*, 70(5):1046–1050, 2015. CODEN CMAPDK. ISSN 0898-1221 (print), 1873-7668 (electronic).

Peters:2018:GSB

[Pet18] Jörg Peters. On G^1 stitched bicubic Bézier patches with arbitrary topology. *Computers and Graphics*, 71(??):154–156, April 2018. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL https://www.sciencedirect.com/science/article/pii/S0097849317301966. See response [ASC18].

Peters:2010:CSS

[PF10] Jörg Peters and Jianhua Fan. On the complexity of smooth spline surfaces from quad meshes.

Computer-Aided Geometric Design, 27(1):96–105, 2010. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:1994:GCC

[PH94] J. Peters and C. M. Hoffmann. Geometric constraints of CAGD. In Dæhlen et al. [DLS94], page ???? ISBN 0-8265-1268-2. LCCN QA565 .M37 1995.

Peters:1998:PS

[PK98] J. Peters and L. Kobbelt. The platonic spheroids. Technical Report 97-052, Dept of Computer Sciences, Purdue University, 1998.

Peters:2023:ABC

[PLK23] Jörg Peters, Kyle Lo, and Kęstutis Karciauskas. Algorithm 1032: Bi-cubic splines for polyhedral control nets. *ACM Transactions on Mathematical Software*, 49(1):7:1–7:??, March 2023. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL `https://dl.acm.org/doi/10.1145/3570158`.

Peters:1997:CVS

[PN97] J. Peters and A. Nasri. Computing volumes of solids enclosed by recursive subdivision surfaces. *Computer Graphics Forum*, 16(3), September 1997. CODEN CGFODY. ISSN 0167-7055 (print), 1467-8659 (electronic).

Peters:1997:SSS

[PR97] Jörg Peters and Ulrich Reif. The simplest subdivision scheme for smoothing polyhedra. *ACM Transactions on Graphics*, 16(4): 420–431, October 1997. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic). URL `http://www.acm.org:80/pubs/citations/journals/tog/1997-16-4/p420-peters/`.

Peters:1998:ECQ

[PR98a] J. Peters and U. Reif. The 42 equivalence classes of quadratic surfaces in affine n-space. *Computer-Aided Geometric Design*, 15, 1998. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:1998:AAG

[PR98b] Jörg Peters and Ulrich Reif. Analysis of algorithms generalizing B-spline subdivision. *SIAM Journal on Numerical Analysis*, 35 (2):728–748, April 1998. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/30434`.

Peters:2004:SCS

[PR04] Jörg Peters and Ulrich Reif. Shape characterization of subdivision surfaces—basic principles. *Computer-Aided Geometric Design*, 21(6):585–599, 2004. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).

Peters:2008:SS

[PR08] Jörg Peters and Ulrich Reif. *Subdivision surfaces*, volume 3 of *Geometry and Computing*. Springer-Verlag Inc., New York, NY, USA, 2008. ISBN 3-540-76405-4. xvi +

204 pp. With introductory contributions by Nira Dyn and Malcolm Sabin.

Peters:2005:FIS

[PRR05] Jörg Peters, Volker Reichelt, and Arnold Reusken. Fast iterative solvers for discrete Stokes equations. *SIAM Journal on Scientific Computing*, 27(2):646–666, March 2005. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/60602.

Peters:1992:SVI

[PS92a] J. Peters and M. Sitharam. On stability of m-variate C^1 interpolation. *Approximation Theory and its Applications*, 8(4):17–32, 1992. ISSN 1000-9221.

Peters:1992:SIC

[PS92b] Jörg Peters and Meera Sitharam. Stability of interpolation from C^1 cubics at the vertices of an underlying triangulation. *SIAM Journal on Numerical Analysis*, 29(2):528–533, April 1992. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Peters:2004:CDS

[PS04] Jörg Peters and Le-Jeng Shiue. Combining 4- and 3-direction subdivision. *ACM Transactions on Graphics*, 23(4):980–1003, October 2004. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic).

Peters:2015:PSS

[PS15] Jörg Peters and Martin Sarov. Polynomial spline surfaces with rational linear transitions. *Computers and Graphics*, 51(??):43–51, October 2015. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0097849315000606.

Peters:2006:EGR

[PSZF06] Jörg Peters, Meera Sitharam, Yong Zhou, and JianHua Fan. Elimination in generically rigid 3D geometric constraint systems. In *Algebraic geometry and geometric modeling*, Math. Vis., pages 205–216. Springer-Verlag Inc., New York, NY, USA, 2006.

Peters:2000:GMC

[PU00] Jörg Peters and Georg Umlauf. Gaussian and mean curvature of subdivision surfaces. In *The mathematics of surfaces, IX (Cambridge, 2000)*, pages 59–69. Springer-Verlag Inc., New York, NY, USA, 2000.

Peters:2001:CCB

[PU01] Jörg Peters and Georg Umlauf. Computing curvature bounds for bounded curvature subdivision. *Computer-Aided Geometric Design*, 18(5):455–461, 2001. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic). Subdivision algorithms (Schloss Dagstuhl, 2000).

Peters:1997:BBI

[PW97a] J. Peters and M. Wittman. Blending basic implicit shapes using trivariate box splines. In Goodman and Martin [GM97], pages 409–426. ISBN 1-874728-12-7.

Peters:1997:BSB

[PW97b] J. Peters and M. Wittman. Box-spline based CSG blends. In W. Bronsvort C. Hoffmann, editor, *Proceedings of Fourth Symposium on Solid Modeling*. ACM Siggraph, May 1997.

Peters:2003:OPL

[PW03] Jörg Peters and Xiaobin Wu. On the optimality of piecewise linear max-norm enclosures based on slefes. In *Curve and surface design (Saint-Malo, 2002)*, Mod. Methods Math., pages 335–344. Nashboro Press, Brentwood, TN, USA, 2003.

Peters:2006:LLI

[PW06] Jörg Peters and Xiaobin Wu. On the local linear independence of generalized subdivision functions. *SIAM Journal on Numerical Analysis*, 44(6):2389–2407, January 2006. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Reif:2006:SAS

[RP06] Ulrich Reif and Jörg Peters. Structural analysis of subdivision surfaces — a summary. In *Topics in multivariate approximation and interpolation*, volume 12 of *Stud. Comput. Math.*, pages 149–190. Elsevier, Amsterdam, The Netherlands, 2006.

Sapidis:1994:DFC

[Sap94] Nickolas S. Sapidis, editor. *Designing fair curves and surfaces: shape quality in geometric modeling and computer-aided design*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 1994. ISBN 0-89871-332-3. xii + 318 pp. LCCN QA567 .D47 1994.

Shiue:2005:RGS

[SJP05] Le-Jeng Shiue, Ian Jones, and Jörg Peters. A realtime GPU subdivision kernel. *ACM Transactions on Graphics*, 24(3):1010–1015, July 2005. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic).

Sarov:2016:RPG

[SP16] Martin Sarov and Jörg Peters. Refinable polycube G-splines. *Computers and Graphics*, 58(??): 92–101, August 2016. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0097849316300644`.

Sitharam:2010:OPS

[SPZ10] Meera Sitharam, Jörg Peters, and Yong Zhou. Optimized parametrization of systems of incidences between rigid bodies. *Journal of Symbolic Computation*, 45(4):481–498, April 2010. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Sitharam:2010:RCC

[SZP10] Meera Sitharam, Yong Zhou, and Jörg Peters. Reconciling conflicting combinatorial preprocessors for geometric constraint systems. *International Journal of Computational Geometry and Applications (IJCGA)*, 20(6):631–651, December 2010. CODEN IJCAEV. ISSN 0218-1959.

Warren:1992:CSC

[War92] Joseph D. Warren, editor. *Curves and surfaces in computer vision and graphics III: 16–18 November 1992, Boston, Massachusetts*, volume 1830 of *Proceedings of SPIE—the International Society for Optical Engineering*. SPIE, International Society for Optical Engineering, Bellingham, WA, USA, 1992. ISBN 0-8194-1031-4. LCCN T385 .C874 1992.

Wu:2004:DFC

[WP04] Xiaobin Wu and Jörg Peters. Distance fields and collision detection: Interference detection for subdivision surfaces. *Computer Graphics Forum*, 23(3):577–584, September 2004. CODEN CGFODY. ISSN 0167-7055 (print), 1467-8659 (electronic).

Yeo:2014:EPA

[YBP14] Young In Yeo, Sagar Bhandare, and Jörg Peters. Efficient pixel-accurate rendering of animated curved surfaces. In *Mathematical methods for curves and surfaces*, volume 8177 of *Lecture Notes in Computer Science*, pages 491–509. Springer-Verlag Inc., New York, NY, USA, 2014.

Yang:2018:CGN

[YP18] Huogen Yang and Jörg Peters. Constraints for geodesic network interpolation at a vertex. *Computer-Aided Geometric Design*, 67:71–78, 2018. CODEN CAGDEX. ISSN 0167-8396 (print), 1879-2332 (electronic).