Curriculum Vitae – Martin J. Turner

Dr Martin J. Turner BA MA (Hons Cantab) PhD CMath MIMA
Research IT, IT Services, The University of Manchester, Manchester M13 9PL UK
07970 132 621 martin.turner@manchester.ac.uk Date of birth, 13th June 1968
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Blog/About page: https://visualisationmatters.com/

Academic Qualifications

1987-1994 St. John's College, Cambridge
PhD in Computer Science *Image Coding*
BA and MA (Hons Cantab) Computer Science Tripos First Class
Member of the BCS, ACM (SIGGRAPH Pioneer), IMA (CMath MIMA), EG

Employment Positions

2015- **Business Relationship Manager** for Research IT, University of Manchester
2012-2021 Roles in STFC: Seconded as the Visualisation Group Leader for the SCD (2013-17); **Visiting Scientist** (2017-21); Seconded as the Visualisation Director for the Harwell Imaging Partnership (2012-15)
2009-2015 External Service Developments Manager, **Research Computing Services**
2004- **Honorary Lecturer** at Computer Sciences, the University of Manchester
2004-2009 Visualization Team Leader of **Manchester Visualization Centre**, Manchester Computing
2003-2004 Joint responsibility **Virtual Environment Centre**, De Montfort University
1999-2003 **Course Leader** for the Advanced Masters in Digital Signal and Image Processing and **Head for Centre of Signal and Image Processing**, Institute of Simulation Sciences, De Montfort University
1997-2004 **Lecturer** then **Senior Lecturer** Computing Science and Engineering, De Montfort University
1994-1997 **Research Fellow** within Imaging Research Centre, School of Design, De Montfort University

Personal Profile

Currently a Business Relationship Manager for Research IT within the University of Manchester supporting all departments related to e-Science and computational infrastructure, involving working as a project manager for numerous UKRI grants. Recently seconded as Visualisation Director for the Harwell Imaging Partnership at STFC/RAL and as Group Leader within the Scientific Computing Division in STFC/DL.

Research interests cover a broad background, specialising in visualization and mathematical topics associated with video, image and signal creation, analysis, processing and presentation. This has resulted in a short-term Fellowship with British Telecom, a published book Fractal Geometry in Digital Imaging by Academic Press, a series of editorial roles within proceedings, over 120 peer reviewed publications; and supervised to completion twenty-one successful MPhil/PhD students. Teaching has covered all academic levels from undergraduate to postgraduate; and is an Honorary Lecturer in Computer Science emphasizing at the MSc and PhD level. A University EIM (Emergency Incident Manager) and IT Services ITEM manager.

Consultancy/Professional Practice

As well as about £0.5m of commercial contracts there have been other consultancy roles:
- Irish Research Council: Member and chair for the Assessment Committee for the Postdoctoral Fellowship / EMBARK and Carolina Schemes x21(2007-22)
- EPSRC Associate and Full College member (2016-22). Proposal reviewer for; Leverhulme 2009; NSF 2010; EPSRC 2011-14x4; and STFC 2012.

- Strategy for BSI/ISO standards reader: XCT panel (TDW/4/4/1 2017-22) and EPSRC XCT Equipment Roadmap panel 2017-19
- NVIDIA Professor Partnership Scheme for student prizes (2008-14)
- Judging panel on the Undergraduate Awards of Ireland and Northern Ireland 2011-12
- Paid Tutorials: Ninth IASTED Computer Graphics and Imaging *Fractals and Noise – Creation and Application* February 2007 Innsbruck & Eurographics UK Chapter Conference June 2006 *GeoWall Construction and Multi-graphics Card Rendering Techniques* with Anja Le Blanc and Louise Lever and June 2005 *Use of Fractals and Noise in Computer Graphics*. Commercial course for British Gas (1996)
- One of the committee members and editor for three IMA conferences with specialist short course lectures (Institute of Mathematics and its Applications): *Segmentation and Edge Detection* (1998 and 2000), *Fractals and Wavelets in Image Processing* (1998 and 2000) and *Stochastic Fractals and Noise* (2000)
- Freelance coding consultant; dealing with the 8501 controller for chemical plant pump monitoring and creating the first digital spot-welder (1992-93); and IBM employment (totaling 15 months, 1987-89)

Key Activities/External Grants

For the period of leadership over and above current roles, there has been £5.5+m for managing staff on across 50+ projects and services; approx 17% for National Services, 65% Government or Research Council Projects and 18% Commercial.

- Imaging experiments: Two neutron tomography experiments at the ISIS Neutron Source, Harwell, UK; 11-15/02/2019 Neutron TOF imaging phantom data to quantify hyperspectral reconstruction algorithms and 18-21/11/2019 Can the second moment of the Bragg edge be resolved for neutron strain measurement?
- EPSRC KTA CPD development for MAGIC outcomes (2011-12)
- Cybernet Systems Corporation contract (2010); KGT (Knowledge Graphics Technology Inc) contracts for MPE (Multi-Pipe Express) phase VI/VII and PST (Parallel Support Toolkit) phase III and combined phases VIII/IX/X (2004-10)
- EEDA (Development Agency) – EU consultation with Intergence Systems Ltd. (2010-11)
- AVS UK (Advanced Visualization System) programme for International AVS Centre website and archive (2007-12)
- Cross-Faculty, consultancy best practice mgmt; (2009-12)

Software development and National Services:

- Harwell Imaging Partnership (STFC/RAL), secondment as Visualisation Director (2012-15), CoI for the EPSRC funded CCPi (Imaging Tomography) network (2011-25) (EPSRC SLA; and Qinetiq/ROKE radar subcontracts) and CCP_PET-MR network (2015-20)
- Two EPSRC flagships CCP (2017-20): CCPi EP/P02226X/1 A Reconstruction Toolkit for Multichannel CT; and CCPPETMR EP/P022200/1 A framework for efficient synergistic spatiotemporal reconstruction of PET-MR dynamic data
- CoI STFC Futures "Global Challenge Network+ in Advanced Radiotherapy" (2015-19, ST/N002423/1)
- STFC/SCD Visualisation Group Leader (STFC/DL) secondment (2013-17)
- EPSRC Multiscale x-ray imaging facility for monitoring and modelling structural evolution in situ EP/F007906/1 (2008-2012, £2.2m) plus 3 months consultancy (-2012)
- JANET(UK) AGSC (Access Grid Support Centre) extension contract (2010-11), and VTAS (Video Technology Advisory Service 2011-12)
- JISC video related projects; SustainedMAGIC (4 months) and AGtivity (6 months - 2011);
- JISC VRE3 projects OneVRE (One VRE to Join Them All) and ViCoVRE (Video Conversion for Virtual Research Environments) with ViCoX; PMgr (2009-12): VRE3 RI project #CritterVRE – LMgr status (2010)
- Short term technology contracts for JANET(UK); ipv6 test 1 month (2007) & MIMAS; Sarongs 4 months; (2008-10) Shibboleth 2 months (2010)

- NCeSS website maintenance (2008-10) and MeRC NeISS collaboration (2012)
- JISC funded VRE2 CREW, Collaborative Research Events on the Web; PMg (2007-09) including four month paid extension VRE2.5 (2009-10) and EPSRC MAGIC (3 months, 2010-11) and CoI MAGIC Phase 2 (2011-16 EP/J500914/1)
- Publicity stand: Eurographics Management and Coordination (2007-09); funded SIGGRAPH role activities (2006-11 with EG stand 2010-11); funded finance transaction for TP.CG 2011-12.
- JISC RACE start-up repository project CoI (2007-09)
- JISC vizNET – managed NW node of the National Visualization Support Network (2006-9)
- Internal University Project "VRE4Manchester" evaluating Portal technologies (2006)
- JISC funded VRE SAGE, Stereoscopic Access Grid Environment; (2004-7)

Scholarships, research projects and training grants for students and staff:

- BASF funded PhD studentship and project (2013-19)
- NERC Doctoral Training Grant (2007-11) combining Computer Science and Earth Sciences; BAESystems Case studentships MBDA (2008-12), Naval (2017-21); CONACyT studentships (2010-14, 2017-21); and LAPP studentship (2014-15).
- EU IP (Intensive Programme) 3 year mobility plan (travel resources) TRABHCI- Technologies to reduce the access barrier in human computer interaction (2010-13)
- EPSRC NAG HECToR dCSE, Massive Remote Batch Visualizer (2009-10)
- AHRC/EPSRC/JISC e-Dance project CoI (2007-10)
- MOD Grand-Challenge Team Tumbleweed – Image Processing (2007-8) and BAE Systems drone swarm Challenge (2018-19)
- EPSRC funded OMII-UK PAG; Access Grid Portlet project (2007-8)
- ESRC funded small project NCeSS for Enhanced Visualization for the GEMEDA Grid enabled economics census data analysis (2006-2007)
- EPSRC CompuSteer travel Network grant: RoboViz (2006-7) and training courses RealityGrid and gViz (2007-8)
- Distributed Learning Fund of the University, with the Japan Centre North West for the Manchester Virtual Campus *3D Avatar based VLE/VRE*; Phase II (2005-6)
- Loaner HPC; HP SVA parallel rendering and composition (2006-11) and SGI Prism (2004-8)
- Administration and Management as Head of the Manchester Visualization Centre (2004-9) Includes internal HPV procurement process, with NWGrid (2005-8 - decommission 2010)

Main projects prior to 2004:

- Joint party in the Focus Group - Virtual Reality; to tender, build and manage commercially the Virtual Environment Centre (2003-4)
- Acted as liaison officer for SIRA IIP (Intelligent Imaging Programme) for interchange of research topics and projects between industry and universities (2000-3)
- Program lead on an advanced masters course in Digital Signal and Image Processing (1999-2003)
- Non-teaching sabbatical contract as main author for Academic Press on aspects of digital fractal mathematics resulting in the book *Fractal Geometry in Digital Imaging*, as well as a dissemination tour including Canada and the USA (1997-2001)
- Short term research fellowship with British Telecom comparing and developing new and old facsimile coding schemes for the next millennium (1996-97)
- Research fellow within the SGI Alias Centre of Excellence, assisted on a series of visualization projects, for clients including Shell, BNF and the BBC (1994-7)
- Throughout the time at De Montfort University, associated with the RAEs for Design, Mathematics and Computer Science, all of whom have increased their grading.

Conference Organiser

- Hosted Eurographics UK Annual Conferences 2002 & 08. Treasurer for conferences from 2004-13 and 2018-26; Executive Member (2002-), Acting Chair for 2011-12 and editor 2021-2023.
- Officer and Treasurer: ACM SIGGRAPH University of Manchester Professional Chapter, 2006-13; manchester.siggraph.org: conference 2008/10@LA, 2009@NewOrleans & 2011@Vancouver; Scribe for EuroACM workshops: 2012@Paris&@Vienna. Member Council of European Chapter Leaders 2012-14
- OGF20 co-chaired with Helen Wright and Stephen Pickles, workshop on Computational Steering on the Grid May 2007; and co-chaired Steering Schools at RAL 2007 and Manchester 2008
- Agenda Setting Workshop *Geographic Visualization across the Social Sciences* for NCeSS June 2006 (ESRC) and related JCSR Visualization User Needs Workshop (JISC) – local organizer 2004
- Editorial and host: IMA Fractal Geometry: Mathematical Techniques, Algorithms and Applications September 2000, IMA Third Conference on Imaging and Digital Image Processing: Mathematical Methods, Algorithms and Applications September 2000, IMA Second Image Processing: Mathematical Methods, Algorithms and Applications September 1998

Postgraduate Supervision

Supervised and ran various research meeting series for PhD/MPhil students and interested researchers. Acted as facilitator for various PhD/MPhil students and as main supervisor/co- to completion for 21.

Papers and other Publications: Martin J. Turner

Refereed Journal Papers

- Cherns, L, Spencer, ART, Rahman, I, Garwood, R, Reedman, C, Burca, G, Turner, M, Hollingworth, NTJ & Hilton, JM 2021, 'Correlative tomography of exceptionally preserved Jurassic ammonite implies hyponome-propelled swimming', Geology.
- Jørgensen, JS, Ametova, E, Burca, G, Fardell, G, Papoutsellis, E, Pasca, E, Thielemans, K, Turner, M, Warr, R, Lionheart, WRB & Withers, PJ 2021, 'Core Imaging Library - Part I: a versatile Python framework for tomographic imaging', Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, vol. 379, no. 2204, 20200192. https://doi.org/10.1098/rsta.2020.0192
- Papoutsellis, E, Ametova, E, Delplancke, C, Fardell, G, Jørgensen, JS, Pasca, E, Turner, M, Warr, R, Lionheart, WRB & Withers, PJ 2021, 'Core Imaging Library - Part II: multichannel reconstruction for dynamic and spectral tomography', Royal Society of London. Proceedings A. Mathematical, Physical and Engineering Sciences, vol. 379, no. 2204, 20200193. https://doi.org/10.1098/rsta.2020.0193
- Ametova, E, Burca, G, Chilingaryan, S, Fardell, G, Jorgensen, J, Papoutsellis, E, Pasca, E, Warr, R, Turner, M, Lionheart, W & Withers, P 2021, 'Crystalline phase discriminating neutron tomography using advanced reconstruction methods', Journal of Physics D: Applied Physics, vol. 54, 325502. https://doi.org/10.1088/1361-6463/ac02f9
- Morley, T, Morris, T & Turner, M 2021, 'A Computer Vision Encyclopedia-Based Framework with Illustrative UAV Applications', Computers, vol. 10, no. 3, 29, pp. 1-11. https://doi.org/10.3390/computers10030029
- Ovtchinnikov, E, Brown, R, Kolbitsch, C, Pasca, E, da Costa-Luis, C, Gillman, AG, Thomas, BA, Efthimiou, N, Mayer, J, Wadhwa, P, Ehrhardt, MJ, Ellis, S, Jorgensen, J, Matthews, J, Prieto, C, Reader, AJ, Tsoumpas, C, Turner, M, Atkinson, D & Thielemans, K 2020, 'SIRF: Synergistic Image Reconstruction Framework', Computer Physics Communications. https://doi.org/10.1016/j.cpc.2019.107087
- Jakob S. Jørgensen, Evelina Ametova, Genoveva Burca, Gemma Fardell, Evangelos Papoutsellis, Edoardo Pasca, Kris Thielemans, Martin Turner, Ryan Warr, William R. B. Lionheart, Philip J. Withers, “Core Imaging Library -- Part I: a versatile Python framework for tomographic imaging”, Special issue on Synergistic Image Reconstruction, Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences 379, no. 2204 (23 August 2021): 20200192. https://doi.org/10.1098/rsta.2020.0192
- Evgueni Ovtchinnikov, Richard Brown, Christoph Kolbitsch, Edoardo Pasca, Casper da Costa-Luis, Ashley G. Gillman, Benjamin A. Thomas, Nikos Efthymiou, Johannes Mayer, Palak Wadhwa, Matthias J. Ehrhardt, Sam Ellis, Jakob S. Jørgensen, Julian Matthews, Claudia Prieto, Andrew J. Reader, Charalampos Tsoumpas, Martin Turner, David Atkinson, Kris Thielemans, SIRF: Synergistic Image Reconstruction Framework, Computer Physics Communications Volume 249, April 2020, 107087, doi: 10.1016/j.cpc.2019.107087
- G. Burca S. Nagella T. Clark D. Tasev I.A. Rahman R.J. Garwood A.R.T. Spencer M.J. Turner J.F. Kelleher *Exploring the potential of neutron imaging for life sciences on IMAT* Wiley 15 October 2018 https://doi.org/10.1111/jmi.12761
- Ramesh, G., Turner, M., Schroeder, B. & Wortmann, F. J., *Analysis of hair shine using rendering and subjective evaluation* 4 Oct 2018, In : ACM Transactions on Applied Perception.
- Arjun Nagendrana, William Crowther, Martin Turner, Alexander Lanzon and Robert Richardson *Design, control, and performance of the ‘weed’ 6 wheel robot in the UK MOD grand challenge* Advanced Robotics Volume 28, Issue 4, 2014 pages 203-218 Taylor and Francis doi:10.1080/01691864.2013.865298
- Martin Turner, Tobias Schiebeck, Meik Poschen, Mike Jones and Andrew Rowley *Creating a Secure Distribution Cross-Portlet System: Experiences from OneVRE,* Eds: Paul Townend, Jie Xu and Jim

Austin (online 10 Dec 2012) Phil. Trans. R. Soc. A 28 January 2013 vol. 371 no. 1983 20120069; doi: 10.1098/rsta.2012.0069

- George W. Leaver, Martin J. Turner, James S. Perrin, Paul M. Mummery, and Philip J. Withers *Porting the AVS/Express scientific visualization software to Cray XT4* Phil. Trans. R. Soc. A August 28, 2011 369 (1949) 3398-3412; doi:10.1098/rsta.2011.0133
- *Proceedings of the UK e-Science All Hands Meeting*, September 2008 *Dancing on the Grid: the use of e-Science tools to extend choreographic knowledge and develop new practice-led research methodologies* Helen Bailey, Simon Buckingham Shum, Anja LeBlanc, Sita Popat, Andrew Rowley and Martin Turner.
- … also Bailey, H., Buckingham-Shum, Le Blanc, A, S., Popat, S., Turner, M., Rowley, A. (2009) *Dancing on the Grid: Using e-Science tools to extend choreographic research* in Philosophical Transactions A of the Royal Society ISBN 978-0-85403-757-5
- YingLiang Ma, W.T. Hewitt and M.J. Turner, *A High Performance Method for Calculating the Minimum Distance between Two 2D and 3D NURBS Curves* Vol. 11, No 1, pp 37-50, Journal of Graphical Tools, AK Peters 2006
- Ghada A. Al Hudhud and Martin Turner *Digital Removal of Power Frequency Artifacts Using a Fourier Space Median Filter* IEEE Signal Processing Letters, Vol. 12 No. 8 August 2005 pp 573-576
- J.M. Blackledge, S. Mikhailov and M.J. Turner *Fractal Modulation and other Applications from a Theory of the Statistics of Dimension*, in Fractals in Multimedia (The IMA Volumes in Mathematics and its Applications) Volume 132, Eds. Michael Barnsley (University of Melbourne), Edward Vrscay (University of Waterloo) Dietmar Saupe (Universitart Leipzig) http://www.ima.umn.edu/multimedia/winter/ms.html Institute for Mathematics and its Applications, University of Minnesota. pp 175-196 Springer-Verlag 2002 ISBN 0-387-95521-6
- Mark D. London, Allan K. Evans and Martin J. Turner *Conditional entropy and randomness in financial time series* Quantitative Finance Volume 1, Number 4, July 2001 pp 414-426 Institute of Physics and IOP Publishing Limited.
- W. Zorski, B. Foxon, J. Blackledge and M. Turner *Irregular Pattern Recognition Using the Hough Transform* Machine Graphics & Vision ISSN 1230-0535 International Journal (Vol.9, No.3, 2000, pp.609-632)
- Martin J. Turner *Optimised Black-and-White Contour Coding* Machine Graphics and Vision pp 397-402 Vol 9 nos 1/2 2000 Published by the Institute of Computer Science Polish Academy of Sciences 01-237 Warsaw, Ordona 21, Poland (in cooperation with Association for Image Processing, Poland) ISSN 1230-0535. 6th International Conference on Computer Graphics and Image Processing GKPO 2000 15-19 May 2000, Podlesice, Poland.
- M.J. Turner and N.E. Wiseman, *Efficient Lossless Image Contour Coding* Computer Graphics Forum, The Eurographics Association, Volume 15, (1996) Number 2, pp 107-118

and Books; Authorship, Chapters and Editorials

- Martin Turner “Lies, damn lies and visualization: Will Metadata and Paradata be a Solution or a Curse?” book chapter 12 in “Paradata. Intellectual Transparency in Historical Visualization” A volume of essays for the AHRC ICT Methods Network series, Digital Arts and Humanities, Ashgate Publishers 2012.
- Martin Turner "Visualization Matters" Module Chapter in 'Research in a Connected World', Eds Alex Voss, Elizabeth Vander Meer, David Freeman (ebook http://cnx.org/content/col10677/1.12), December 2009
- Edited book – Wiley Press *Geographic Visualization: Concepts, Tools and Applications* edited by Martin Dodge, Mary McDerby and Martin Turner, April 2008
- …. with book chapter, “The Power of Geographical Visualizations” Martin Dodge, Mary McDerby and Martin Turner in Wiley Press *Geographic Visualization: Concepts, Tools and Applications* April 2008
- … with book chapter, “Experiences of Using State of the Art Immersive Technologies for Geographic Visualization” Mary McDerby and Martin Turner in Wiley Press *Geographic Visualization: Concepts, Tools and Applications* April 2008

- Jonathan M. Blackledge, Allan K. Evans and Martin J. Turner are editors of *Fractal Geometry: Mathematical Methods, Algorithms and Applications*: Based on the Proceedings of the First IMA Conference on Fractal Geometry (September 2000) Ellis Horwood 2002 ISBN 1-904275-00-1
- Jonathan M. Blackledge and Martin J. Turner are editors of *Image Processing III: Mathematical Methods, Algorithms and Applications*: Based on the Proceedings of the Third IMA Conference on Image Processing (September 2000) Ellis Horwood 2001 ISBN 1-898563-72-1
- Jonathan M. Blackledge and Martin J. Turner are editors of *IMA Second Image Processing: Mathematical Methods, Algorithms and Applications* Based on the Proceedings of the Second IMA Conference on Image Processing (November 1998) Ellis Horwood Published 2000
- M.J. Turner, J.M. Blackledge, P.R. Andrews *Fractal Geometry in Digital Imaging* Academic Press. Published June 1998. ISBN:0127039709

and Refereed Conference Papers etc.

- Cherns, L, Spencer, ART, Rahman, I, Garwood, R, Reedman, C, Burca, G, Turner, M, Hollingworth, NTJ & Hilton, JM 2021, 'Correlative tomography of exceptionally preserved Jurassic ammonite implies hyponome-propelled swimming', Geology.
- Jørgensen, JS, Ametova, E, Burca, G, Fardell, G, Papoutsellis, E, Pasca, E, Thielemans, K, Turner, M, Warr, R, Lionheart, WRB & Withers, PJ 2021, 'Core Imaging Library - Part I: a versatile Python framework for tomographic imaging', Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, vol. 379, no. 2204, 20200192. https://doi.org/10.1098/rsta.2020.0192
- Papoutsellis, E, Ametova, E, Delplancke, C, Fardell, G, Jørgensen, JS, Pasca, E, Turner, M, Warr, R, Lionheart, WRB & Withers, PJ 2021, 'Core Imaging Library - Part II: multichannel reconstruction for dynamic and spectral tomography', Royal Society of London. Proceedings A. Mathematical, Physical and Engineering Sciences, vol. 379, no. 2204, 20200193. https://doi.org/10.1098/rsta.2020.0193
- Ametova, E, Burca, G, Chilingaryan, S, Fardell, G, Jorgensen, J, Papoutsellis, E, Pasca, E, Warr, R, Turner, M, Lionheart, W & Withers, P 2021, 'Crystalline phase discriminating neutron tomography using advanced reconstruction methods', Journal of Physics D: Applied Physics, vol. 54, 325502. https://doi.org/10.1088/1361-6463/ac02f9
- Morley, T, Morris, T & Turner, M 2021, 'A Computer Vision Encyclopedia-Based Framework with Illustrative UAV Applications', Computers, vol. 10, no. 3, 29, pp. 1-11. https://doi.org/10.3390/computers10030029
- Ovtchinnikov, E, Brown, R, Kolbitsch, C, Pasca, E, da Costa-Luis, C, Gillman, AG, Thomas, BA, Efthimiou, N, Mayer, J, Wadhwa, P, Ehrhardt, MJ, Ellis, S, Jorgensen, J, Matthews, J, Prieto, C, Reader, AJ, Tsoumpas, C, Turner, M, Atkinson, D & Thielemans, K 2020, 'SIRF: Synergistic Image Reconstruction Framework', Computer Physics Communications. https://doi.org/10.1016/j.cpc.2019.107087
- Sandoval, M, Turner, M & Morris, T 2021, 'Multiple DOF for X-ray CT Hydrocarbon Exploration', Paper presented at Computer Graphics & Visual Computing (CGVC) 2021, Lincoln, United Kingdom, 8/09/21 - 10/09/21. https://doi.org/ISBN 978-3-03868-158-8
- Sandoval Olive, M, Turner, M & Morris, T 2020, 'Controlling Game Objects Using Multiple Degrees-Of-Freedom', Paper presented at 38th Computer Graphics & Visual Computing, London, United Kingdom, 10/09/20 - 11/09/20. https://doi.org/10.2312/cgvc.20201158
- Morley, T, Morris, T & Turner, M 2020, 'Encyclopaedia-based Framework for 3D Image Processing Applications', Paper presented at 38th Computer Graphics & Visual Computing, London, United Kingdom, 10/09/20 - 11/09/20 pp. 27-31. https://doi.org/10.2312/cgvc.20201147
- Sandoval Olive, M, Turner, M & Morris, T 2020, 'Interaction Framework within Collaborative Virtual Environments for Multiple Users each interacting with Multiple Degrees-Of-Freedom Controllers', 38th Computer Graphics & Visual Computing, London, United Kingdom, 10/09/20 - 11/09/20. https://doi.org/10.2312/cgvc.20201155
- Versatile regularisation toolkit for iterative image reconstruction with proximal splitting algorithms May 2019 DOI: 10.1117/12.2534289 Conference: The Fifteenth International Meeting on Fully Three-Dimensional Image Reconstruction in Radiology and Nuclear Medicine Daniil Kazantsev,

Edoardo Pasca, Mark Basham, Martin Turner, Matthias J.Ehrhard, Kris Thielemans, Benjamin A. Thomas, Evgueni Ovtchinnikov, Philip J. Withers, Alun W. Ashton

- Evgueni Ovtchinnikov, Richard Brown, Christoph Kolbitsch, Edoardo Pasca, Casper da Costa-Luis, Ashley G. Gillman, Benjamin A. Thomas, Nikos Efthymiou, Johannes Mayer, Palak Wadhwa, Matthias J. Ehrhardt, Sam Ellis, Jakob S. Jørgensen, Julian Matthews, Claudia Prieto, Andrew J. Reader, Charalampos Tsoumpas, Martin Turner, David Atkinson, Kris Thielemans, SIRF: Synergistic Image Reconstruction Framework, Computer Physics Communications 2019
- Daniil Kazantsev, Edoardo Pasca, Mark Basham, Martin Turner, Matthias J. Ehrhardt, Kris Thielemans, Benjamin A. Thomas, Evgueni Ovtchinnikov, Philip J. Withers, Alun W. Ashton, "Versatile regularisation toolkit for iterative image reconstruction with proximal splitting algorithms", Fully3D 2019, Philadelphia, USA
- Evgueni Ovtchinnikov, David Atkinson, Ronald Fowler, Christoph Kolbitsch, Julian Matthews, Claudia Prieto, Andrew Reader, Charalampos Tsoumpas, Martin Turner, Kris Thielemans, A Proposal for an Open Source Framework for Synergistic Image Reconstruction of PET-MR Data, PSMR 2016, 5th Conference on PET/MR and SPECT/MR, Koeln, Germany.
- Ovtchinnikov E, Atkinson D, Bertolli O, da Costa-Luis C, Efthimiou N, Fowler R, Kolbitsch C, Matthews J, Prieto C, Reader A, Thomas BA, Tsoumpas C, Turner M, Thielemans K, SIRF: Synergistic Image Reconstruction Framework, PSMR 2017, 6th Conference on PET/MR and SPECT/MR, Lisbon, Portugal
- Ovtchinnikov E, Atkinson D, Kolbitsch C, Thomas BA, Bertolli O, da Costa-Luis C, Efthimiou N, Fowler R, Pasca E, Wadhwa P, Emond E, Matthews J, Reader A, Tsoumpas C, Prieto C, Turner M, Thielemans K, SIRF: Synergistic Image Reconstruction Framework, IEEE MIC 2017, Atlanta, George, USA
- Daniil Kazantsev, Edoardo Pasca, Mark Basham, Martin Turner, Matthias J. Ehrhardt, Kris Thielemans, Benjamin A. Thomas, Evgueni Ovtchinnikov, Philip J. Withers, Alun W. Ashton, "Versatile regularisation toolkit for iterative image reconstruction with proximal splitting algorithms", Fully3D 2019, Philadelphia, USA. DOI: 10.1117/12.2534289
- Daniil Kazantsev, Edoardo Pasca, Mark Basham, Martin Turner, Matthias J. Ehrhardt, Kris Thielemans, Benjamin A. Thomas, Evgueni Ovtchinnikov, Philip J. Withers, Alun W. Ashton, "Versatile regularisation toolkit for iterative image reconstruction with proximal splitting algorithms", Fully3D 2019, Philadelphia, USA
- Evgueni Ovtchinnikov, Richard Brown, Christoph Kolbitsch, Edoardo Pasca, Casper da Costa-Luis, Ashley G. Gillman, Benjamin A. Thomas, Nikos Efthymiou, Johannes Mayer, Palak Wadhwa, Matthias J. Ehrhardt, Sam Ellis, Jakob S. Jørgensen, Julian Matthews, Claudia Prieto, Andrew J. Reader, Charalampos Tsoumpas, Martin Turner, David Atkinson, Kris Thielemans, SIRF: Synergistic Image Reconstruction Framework, Computer Physics Communications 2019
- Sandoval Olive, M., Morris, T. & Turner, M., Multiple Degrees-Of-Freedom Input Devices for Interactive Command and Control within Virtual Reality in Industrial Visualizations 24 Jul 2018 Extended Abstract
- Turner, M., Morris, D. & Sandoval Olive, M., 12 DoF interaction for scientific visualisation 14 Sep 2017, EG UK Computer Graphics and Visual Computing. Eurographics
- M. Turner, S, Nagella., R. Fowler, R. Allan, E. Pasca and E. Yang, Human-in-the-Loop Visualisation Architecture for Monitoring Remote Compute 14 Sep 2017, EG UK Computer Graphics and Visual Computing. Eurographics
- Evgueni Ovtchinnikov, David Atkinson, Ottavia Bertolli, Casper da Costa-Luis, Nikos Efthimiou, Ronald Fowler, Christoph Kolbitsch, Julian Matthews, Claudia Prieto, Andrew Reader, Benjamin A. Thomas, Charalampos Tsoumpas, Martin Turner, Kris Thielemans, SIRF: Synergistic Image Reconstruction Framework, PSMR 2017, Lisbon, Portugal
- E. Ovtchinnikov, D. Atkinson, C. Kolbitsch, B. A. Thomas, O. Bertolli, C. da Costa-Luis, N. Efthimiou, R. Fowler, E. Pasca, P. Wadhwa, E. Emond, J. Matthews, A. J. Reader, C. Tsoumpas, C. Prieto, M. Turner, K. Thielemans, SIRF: Synergistic Image Reconstruction Framework, IEEE MIC 2017, Atlanta, USA
- Ramesh, G., Turner, M. & Wortmann, F., Analysis of hair shine using hair rendering and subjective evaluation Jun 2016

- M.J. Turner, R. Fowler and T. Morris *Collaborative Computational Projects - Visualisation Applications Survey* Computer Graphics and Visual Computing (CGVC) EGUK June 2016
- Evgueni Ovtchinnikov, David Atkinson, Ronald Fowler, Christoph Kolbitsch, Julian Matthews, Claudia Prieto, Andrew Reader, Charalampos Tsoumpas, Martin Turner, Kris Thielemans, A Proposal for an Open Source Framework for Synergistic Image Reconstruction of PET-MR Data, PSMR 2016, Koeln, Germany.
- Erica Yang, Derek Ross, Srikanth Nagella, Martin Turner, Winfried Kockelmann, Genoveva Burca, Federico Montesino Pouzols, *Data Optimised Computing for Heterogeneous Big Data Computing Applications* IEEE Int. Conference on Big Data conference Oct 29-Nov 1 2015 Santa Clara, CA
- Myrna M. Rodríguez-Frías, Tim Morris and Martin Turner (2014/2015). ZENODO 08 July 2015 Indoor Positioning System DOI 10.5281/zenodo.19737; 29 May 2015 WiFi sampling DOI 10.5281/zenodo.18130; 07 January 2015 Indoor Positioning System Database schema DOI 10.5281/zenodo.13793 Indoor Positioning Database. DOI: 10.5281/zenodo.12913:
- Girish Ramesh and Martin J. Turner *Measuring Realism in Hair Rendering* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference September 2013, Silvester Czanner, Wen Tang (Editors)
- S. Longshaw, M.J. Turner and E. Finch, *Visualizing a Spherical Geographical Discrete Element Model of Fault Evolution* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference September 2012, Silvester Czanner, Hamish Carr (Editors)
- Michael May, Martin J. Turner, and Tim Morris. *FAW for Multi-exposure Fusion Features* PSIVT2011 (Fifth Pacific-Rim Symposium on Image and Video Technology) November 2011 In Ho, Y.-S (ed.) Advances in Image and Video Technology, volume 7087 of Lecture Notes in Computer Science, pages 289-300. Springer Berlin / Heidelberg 2012
- Michael May, Martin J. Turner, and Tim Morris. *Analysing False Positives and 3D Structure to Create Intelligent Thresholding and Weighting Functions for SIFT Features* PSIVT2011 (Fifth Pacific-Rim Symposium on Image and Video Technology) November 2011 In Ho, Y.-S (ed.) Advances in Image and Video Technology, volume 7087 of Lecture Notes in Computer Science, pages 190-201. Springer Berlin / Heidelberg 2012
- Martin Turner, Tobias Schiebeck, Meik Poschen and Andrew Rowley *Creating a Secure Distribution Cross-Portlet System for Sharing Electronic Documents: Experiences from the OneVRE Virtual Research Environment Project* (extended abstract) e-Science AHM York September 2011
- David Langkamp, Gareth Roberts, Ashley Scillitoe, Alberto Llopis-Pascual, Juraj Zamecnik, Proctor Sam, Myrna Rodriguez-Frias, Martin Turner, Alexander Lanzon and William Crowther *An engineering development of a novel hexrotor vehicle for 3D applications* International Micro Air Vehicle conference and competitions (IMAV 2011), 12 - 15 September Netherlands.
- M.M. Rodriguez-Frias, T. Morris, M. Turner and A. Rowley, *Advantages of 3D Extraction and Spatial Awareness within a Videoconferencing Environment* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference September 2011, Hamish Carr, Ian Grimstead (Editors)
- Michael May, M.J. Turner, K. Markham, T. Morris. *Object Recognition from Infra Red image data for Mobile Platforms: Scale Invariant Feature Transform - A Graphical Parameter Analysis* pp 1-29-1-40, MCM-ITP Conference Proceedings 19-20 October 2010.
- George Leaver and Martin Turner *Porting AVS/Express to Cray XT4* Theme 1. Infrastructures, Systems and Tools for e-Research – led by Neil Chue Hong, e-Science AHM Cardiff 2010
- Meik Poschen, Tobias Schiebeck, Martin Turner and Andrew Rowley *User Engagement and Requirements for Joining Portal based VRE through Access Grid Technologies* Theme 4. Sharing, Collaboration and Interfaces for e-Research – led by Rob Procter e-Science AHM Cardiff 2010
- Andrew Rowley and Martin Turner *Recording and Replay of Multiple Simultaneous Videos* Theme 4. Sharing, Collaboration and Interfaces for e-Research – led by Rob Procter e-Science AHM Cardiff 2010
- M. Turner, G. Leaver, J. Perrin *Remote Scientific Visualization for Large Datasets* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference September 2010
- Michael May, Martin J. Turner, and Tim Morris *Scale Invariant Feature Transform: A Graphical Parameter Analysis* Proceedings of the BMVC 2010 UK postgraduate workshop, pages 5.1-5.11. BMVA Press, September 2010

- S. M. Longshaw, M. J. Turner, E. Finch and R. Gawthorpe. *Analysing the use of Real-time Physics Engines for Scientific Simulation: Exploring the Theoretical and Practical Benefits for Discrete Element Modelling* In ACME2010, proceedings of the 18th Annual Conference of the Association of Computational Mechanics in Engineering. pages 199-202. 2010. Southampton. UK
- Tobias Schiebeck, Meik Poschen, Andrew Rowley, Martin Turner *Joining Portal-based VREs through Access Grid Technologies*, e-Science AHM Oxford 2009
- Stephen Longshaw, Martin Turner, Emma Finch, *Physics Engine Based Parallelised Discrete Element Model* International Conference on Particle-Based Methods, E. O˜nate and D.R.J. Owen (Eds) Particles 2009
- Sam Proctor, Martin Turner, William Crowther *Distributed Simulation System for UAV Computer Vision Systems*, CEAS 2009 European Air and Space Conference, Short paper, Manchester October 2009
- Bailey, H., Buckingham-Shum, S., Popat, S., Turner, M., (2009) *e-Dance: digital topographies and knowledge cartography in networked performance* in the proceedings in ISEA 2009 15th International Conference Proceedings ISBN 978-981-08-0768-9.
- S.M. Longshaw, M.J. Turner, E. Finch, and R. Gawthorp, *Discrete Element Modelling Using a Parallelised Physics Engine* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2009
- Michael May, Tim Morris, Keith Markham, William J. Crowther, Martin .J. Turner, *Towards Object Recognition using HDR Video, Stereoscopic Depth Information and SIFT* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2009
- Michael May, Sam Proctor, Tim Morris, William J. Crowther, Martin .J. Turner, *Image Processing: Recognition and navigation for UAVs using Computer Vision* MCM-TP Conference 22-23 June 2009 Domain 1 MA2.3 1-17:1-23 Lille
- Bailey, H., Turner, M. (2008) "Embodying Interfaces: Stereobodies and Choreographic Morphologies" DRHA 2008 (Digital Resources in the Humanities and Arts) Annual International Conference, University of Cambridge, UK
- Helen Bailey, Simon Buckingham-Shum, Sita Popat, Martin Turner *e-Dance: Relocating Choreographic Practice as a New Modality for Performance and Documentation* 14th International Symposium on Electronic Art; Proceedings of ISEA2008, Singapore (#467) pp 41-43 25th July – 3rd August 2008
- Helen, Bailey, James Hewison and Martin Turner *Choreographic Morphologies: Digital Visualization of Spatio-Temporal Structures in Dance and the Implications for Performance and Documentation* EVA London 6-8 July 2008, ISBN 978-1-906124-07-6.
- Anja Le Blanc, Andrew Rowley, Tobias Schiebeck, Martin Turner *Access Grid Anywhere* 4th International Conference on e-Social Science, Manchester June 2008
- Meik Poschen, Michael Daw, Rob Procter, Martin Turner, Terry Hanley, Roger Slack, Andy Hall, Mike Jones, Rebecca Jones, Anja Le Blanc, Emma Place, Nikki Rogers, Andrew Rowley, Tobias Schiebeck, Damian Steer, Caroline Williams *User-centered development of a Virtual Research Environment to support Collaborative Research Events* 4th International Conference on e-Social Science, Manchester June 2008
- D Brayford, M Turner, W T Hewitt *A Physical Model for the Polarized Scattering of Light* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2008
- S M Longshaw, M J Turner and W T Hewitt *Interactive Grid Based Binning for Information Visualization* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2008
- J Liu, W T Hewitt, W R B Lionheart, J Montaldi and M Turner *A Lemon is not a Monstar: Visualization of Singularities of Symmetric Second Rank Tensor Fields in the Plane* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2008
- M J McDerby, M J Turner, G W Leaver *Modes of Virtual Environments Integrated within Collaborative Environments* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2008
- Anja Le Blanc, Andrew Rowley, Tobias Schiebeck, Martin Turner *Announcement of the Portlet Access Grid* AGRetreat 2008 Best Product Prize

- Tobias Schiebeck, Anja Le Blanc, Andrew Rowley, Helen Bailey, Sita Popat, Martin Turner, Mary McDerby *Connecting Dancers – Remote Choreography* Access Grid Retreat Simon Fraser University, Canada 2008
- Yuan Wang, Martin Turner and Terry Hewitt, *Constructing and Evaluating Vibration Magnitude Models for Visualization The 16th Symposium on Haptic Interfaces for Virtual Environments and Teleoperator Systems* March 13-14, 2008 sponsored by the IEEE Visualization and Graphics Technical Committee (VGTC), and is affiliated with the Technical Committee on Haptics
- Michael Daw, Rob Procter, Andy Hall, Roger Slack, Martin Turner, Mike Jones, Meik Poschen, Nikki Rogers, Caroline Williams, *Enhancing the Value of Collaborative Research Events through Virtual Research Environments* Proceedings of the UK e-Science All Hands Meeting, September 2007
- M. Riding, J.D. Wood and M.J. Turner, "Deploying visualization applications as remote services" *Proceedings of the UK e-Science All Hands Meeting*, September 2007
- Andrew Rowley, Michael Daw, Anja Le Blanc, Tobias Schiebeck, Martin Turner, "Portalization Process for the Access Grid" *Proceedings of the UK e-Science All Hands Meeting*, September 2007
- H. Bailey, M. Turner, A. Le Blanc "e-Dancing: The impact of VREs in defining new research methodologies for embodied, practice-led research in choreography and performance" *Proceedings of the UK e-Science All Hands Meeting*, September 2007
- M. Turner and A. LeBlanc "Collaborative Stereoscopic Access Grid Environment Project" 11th July 2007, JISC ICT Workshop, New directions in e-Science & the Arts, organisers: Ann Borda, Stuart Dunn.
- H. Bailey A. Le Blanc, M. Turner *A Practice-led Choreographic Investigation using the Collaborative Stereoscopic Access Grid Environment*, EVA (Electronic Visualisations in the Arts) International Conference Proceedings, London University for the Arts, London College of Printing ISBN 0 9453146-8-9 July 2007
- Martin J. Turner *Advantages of allowing Hexagonal Pixels to be used as a Boundary Description Format* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2007
- Mary J. McDerby, William T. Hewitt, and Martin J. Turner *Streaming and Data Enrichment* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2007
- K.W. Brodlie, J. Brooke, M. Chen, D. Chisnall, C. Hughes, N.W. John, M.W. Jones, M. Riding, N. Roard, M. Turner, and J.D.Wood *Adaptive Infrastructure for Visual Computing* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2007
- Anja Le Blanc, Martin Turner, Simon Peters "A Lightweight Visualization Tool for Microdata Based e-Research" Short Paper May 2007 *2nd International e-social science conference*
- A.D. Graham, M.J. Turner, and W.T. Hewitt *Multi-Scale Image De-Noising and De-Cluttering using Cross-Scale Mathematical Morphology* Ninth IASTED International Conference on Computer Graphics and Imaging CGIM 2007 February 13 – 15, 2007 Innsbruck, Austria
- A. Le Blanc, J. Bunt, M. Turner *'Virtual Learning Space' for Language Learning - Past, Present, Future* Web Based Communities IADIS International Conference February 18-20, 2007
- Y. Wang, M.J. Turner., W.T. Hewitt *Evaluation of Different Vibration Visualization Modes for Line Tracking* WSCG 2007 January 29 – 1 February 2007
- K.W. Brodlie, J. Brooke, M. Chen, D. Chisnall, C.J. Hughes, N.W. John, M.W. Jones, M. Riding, N. Roard, M.J. Turner and J. Wood, *A Framework for Adaptive Visualization* IEEE Visualization 2006 Poster and Abstract.
- Bailey, H., and M. Turner Stereo-bodies: Improvisation and Choreography within the Access Grid *Locating Grid Technologies Symposium AHRC e-Science Workshop Scheme* October 2006
- M. Turner, H. Bailey, J. Hewison, *Stereo Bodies: Choreographic Explorations Within Real and Virtual Spaces* DRHA Sep 2006
- Y. Wang, M. Turner, J. Perrin, W.T. Hewitt *A Haptic Visualization Mapping Model - Magnitude Model of Sinusoidal Vibration* EuroHaptics July 3-6, 2006 Paris
- J. Liu, M. Turner, W.T. Hewitt and J.S. Perrin, *HyperStreamball Visualization for Symmetric Second Order Tensor Fields* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2006 pp31-38

- Andrew D. Graham, Martin J. Turner and W.T. Hewitt *An Interactive Multiscale Framework for Enhancement and Visualization of 2D and 3D Image Data* Theory and Practice of Computer Graphics Eurographics UK Chapter Conference June 2006 pp171-178
- M.J. Turner, A. Le Blanc, *Augmented Stereoscopic Codecs over the Access Grid Environment* Extended Abstract SC Global 15th November 2005 http://sc05.supercomputing.org/schedule/event_detail.php?evid=5135
- David Brayford, Martin Turner, W.T. Hewitt *A Physical Based Spectral Model for Polarized subsurface Light Scattering* In Proceedings of Pacific Graphics 2005 Conference, pp. 25-27, Oct 2005.
- J. Liu, J. Perrin, M. Turner and W.T. Hewitt *Perlin Noise and 2D Second-Order Tensor Field Visualization* Theory and Practice of Computer Graphics Eurographics UK Chapter UK Conference June 2005 pp113-118
- G.A.Kh. Al-Hudhud, A. Ayesh, M.J. Turner and H. Istance *Simulation and Visualization of a large scaled Real Time Multi-Robot system* Theory and Practice of Computer Graphics Eurographics UK Chapter UK Conference June 2005 pp147-154
- Y.L. Ma, F.E. Pollick and M.J. Turner, *A statistical approach to gait recognition by using cyclogram*, The IEE International Conference on Visual Information Engineering (VIE 2005) Convergence in Graphics and Vision 4-6 April 2005, University of Glasgow, UK Organised by the IEE Visual Information Engineering Professional Network http://conferences.iee.org/vie2005/
- E. Mirlis, H.I. Bjelkhagen and M.J. Turner *Selection of optimal wavelengths for holography recording* Proc of SPIE Practical Holography XIX: Materials and Application, edited by T.H. Jeong and H.I. Bjelkhagen January 2005 Vol. 5742-15
- G.A.Kh. Al-Hudhud, A. Ayesh, M.J. Turner and H. Istance *Agent negotiation and communication within a real time cooperative multi-agent system* 5th International Conference on Recent Advances in Soft Computing (RASC2004) Dec 2004
- G.A.Kh. Al-Hudhud, M.J. Turner and A. Ayesh *Speech act and blackboard negotiation based communication protocol for real time multi-agent systems* 2004 UK Workshop on Computational Intelligence (UKCI-04) September pp 112-120, 2004
- M.J. Turner *Shell creation, representation and visualisation from an arbitrary f(x,y,z) = 0 polynomial shape description* pp 167- 172 Eurographics UK Chapter June 2004 IEEE Computer Society
- M. Jäger, H. I. Bjelkhagen, M. Turner, *Modeling the Lippmann color process* [5290-29] Materials II Chair: Roger A. Lessard, Univ. Laval (Canada) Practical Holography XVIII: Materials and Applications Proceedings of SPIE Vol. #5290 Conference 5290 Monday-Tuesday 19-20 Jan 2004
- Martin Turner *Shell Representation and Compression Conscious Manipulation for Three Dimensional Graphical Datasets* pp 162-169 Theory and Practice of Computer Graphics 2003 21st Annual Conference EG Eurographics UK Chapter 3rd-5th June 2003, Birmingham. Ed Mark W. Jones IEEE Computer Society ISBN 0-7695-1942-3
- M.J. Turner and J.M. Blackledge *The Making of `Fractal Geometry in Digital Imaging'* First IMA Conference on Fractal Geometry: Mathematical Methods, Algorithms and Applications. 19-22 September 2000 in Fractal Geometry: Mathematical Methods, Algorithms and Applications Ellis Horwood 2002 ISBN 1-904275-00-1 pp223-232
- M.J. Turner *Properties of Fractal Compression and their use within Texture Mapping* First IMA Conference on Fractal Geometry: Mathematical Methods, Algorithms and Applications. 19-22 September 2000 in Fractal Geometry: Mathematical Methods, Algorithms and Applications Ellis Horwood 2002 ISBN 1-904275-00-1 pp149-188
- M.J. Turner and J.M. Blackledge *Analysis of the Limitations of Fractal Dimension Texture Segmentation for Image Characterisation* First IMA Conference on Fractal Geometry: Mathematical Methods, Algorithms and Applications. 19-22 September 2000 in Fractal Geometry: Mathematical Methods, Algorithms and Applications Ellis Horwood 2002 ISBN 1-904275-00-1 pp114-137
- M.D. London, A.K. Evans and M.J. Turner *Why study financial time series?* First IMA Conference on Fractal Geometry: Mathematical Methods, Algorithms and Applications. 19-22 September 2000 in Fractal Geometry: Mathematical Methods, Algorithms and Applications Ellis Horwood 2002 ISBN 1-904275-00-1 pp68-113

- Zorski W., Zak A., Turner M. *Hardware Implementation of the Hough Technique for Irregular Pattern Recognition*. Proceedings of the 8th IEEE International Conference on Methods and Models in Automation and Robotics (MMAR'2002), 2-5 September 2002, Vol.1, pp.561-566.
- ... also a Biuletyn Instytutu Automatyki i Robityki Nr 17 (2002) 25-43 ISSN 1427-35-78 Wojskowa Akademia Techniczna
- Allan K. Evans, Martin J. Turner and John N. Magno (Centre for Modern Optics, De Montfort University, Honeywell Technology Centre, Morristown, NJ 07692-1039 USA) Third IMA Conference on Image Processing: Mathematical Methods, Algorithms and Applications. 12-15 September 2000 *Computer-generated holograms: from the kitchen sink to LCD displays* in Image Processing III: Mathematical Methods, Algorithms and Applications Ellis Horwood 2001 ISBN 1-898563-72-1 pp19-26
- Diven Topiwala, Allan K. Evans and Martin J. Turner Third IMA Conference on Image Processing: Mathematical Methods, Algorithms and Applications. 12-15 September 2000 *Convergence and Stagnation in the Phase Retrieval Algorithm* in Image Processing III: Mathematical Methods, Algorithms and Applications Ellis Horwood 2001 ISBN 1-898563-72-1 pp287-298
- W. Zorski, B. Foxon, J. Blackledge and M. Turner (Military University of Technology, Poland and De Montfort Universit, Leicester) Third IMA Conference on Image Processing: Mathematical Methods, Algorithms and Applications. 12-15 September 2000 *Applications of the Hough Transform: Part 2 Iris and Fingerprint Identification* in Image Processing III: Mathematical Methods, Algorithms and Applications Ellis Horwood 2001 ISBN 1-898563-72-1 pp69-81
- ... also a Biuletyn Instytutu Automatyki i Robityki Nr 15 (2001) 43-54 ISSN 1427-35-78 ROK 7 Wojskowa Akademia Techniczna
- W. Zorski, B. Foxon, J. Blackledge and M. Turner (Military University of Technology, Poland and De Montfort University, Leicester) Third IMA Conference on Image Processing: Mathematical Methods, Algorithms and Applications. 12-15 September 2000 *Applications of the Hough Transform: Part 1 Irregular Colour Pattern Recognition using the Hough Transform* in Image Processing III: Mathematical Methods, Algorithms and Applications Ellis Horwood 2001 ISBN 1-898563-72-1 pp54-68
- ... also a Biuletyn Instytutu Automatyki i Robityki Nr 15 (2001) 27-42 ISSN 1427-35-78 ROK 7 Wojskowa Akademia Techniczna
- M.J. Turner and A.K. Evans (De Montfort University, Leicester) Third IMA Conference on Image Processing: Mathematical Methods, Algorithms and Applications. 12-15 September 2000 *Analysis of Edge Based Smoothing Techniques for Facsimile Images* in Image Processing III: Mathematical Methods, Algorithms and Applications Ellis Horwood 2001 ISBN 1-898563-72-1 pp152-178
- Tahir Karim and Martin Turner *Subjective and Objective Stereo Image Compression Analysis* pp 125-130 ISBN 0-9521097-9-418th Annual Conference EG Eurographics UK Chapter 2000 4th -6th April 2000, Swansea. ISBN 0-9521097-9-4
- M.J. Turner, 17th Annual Eurographics UK Chapter Conference 13-15th April 1999 *Design of Fast Fractal Texture Mapping* ISBN 0-9521097-8-6
- Witold Zorski, Brian Foxon, Jonathan Blackledge, Martin Turner *Application of the Circle Hough Transform with a Clustering Technique to Segmentation* Second IMA Conference on Image Processing: Mathematical Methods, Algorithms and Applications. 22-25 September 1998 "Image Processing II: Mathematical Methods, Algorithms and Applications" Ellis Horwood Publishing Limited. Published 2000 ISBN 1-898563-61-6
- ... also a Biuletyn Instytutu Automatyki i Robityki Nr 10 (1999) 69-79 ISSN 1427-35-78 Wojskowa Akademia Techniczna
- A.K. Evans and M.J. Turner, *Specialisation of evolutionary algorithms and data structures for the IFS inverse problem* Second IMA Conference on Image Processing: Mathematical Methods, Algorithms and Applications. 22-25 September 1998 "Image Processing II: Mathematical Methods, Algorithms and Applications" Ellis Horwood Publishing Limited. Published 2000 ISBN 1-898563-61-6
- M.J. Turner, *Design of Entropy Conscious and Constrained Image Operations using a Contour Tree Image Definition* Second IMA Conference on Image Processing: Mathematical Methods, Algorithms and Applications. 22-25 September 1998 "Image Processing II: Mathematical Methods, Algorithms and Applications" Ellis Horwood Publishing Limited. Published 2000 ISBN 1-898563-61-6

- M.J. Turner and K. Halton *Facsimile - Images of the Future* Based on Poster Display, extended abstract, Data Compression Conference, March/April 1997. IEEE Computer Society Press pg 474 ISBN: 0-8186-7761-9.
- M.J. Turner, *Study of the Contour Tree Format and Compression Conscious Image Operations* SERCentre Technical Monographs, number 9. De Montfort University. August 1996.
- M.J. Turner, *Image Operations Using a Semi-compressed Contour Tree Image Definition'* IRC Technical Report Number 002. Based on Poster Display and extended abstract, Data Compression Conference, March/April 1996. IEEE Computer Society Press.
- M.J. Turner, *Applying Information Theory for Texture Visualisation and Redrawing Art*, Eurographics UK Chapter, March 1996.UK Chapter's 14th Conference held at Imperial College, London. Volume 2, pp 113-121 ISBN 0 952 1097 35
- M.J. Turner, *Lossless Region Coding Schemes* IRC Technical Report Number 001. Based on Poster Display and extended abstract, Data Compression Conference, March 1995, pp 481. IEEE Computer Society Press, ISBN: 0-8186-7012-6.
- M.J. Turner, *The Contour Tree Image Encoding Technique and File Format* Technical Report, University of Cambridge, Computer Laboratory, UK July 1994 TR344.
- ... above adapted from PhD Thesis of the same title, University of Cambridge April 1994: open source at https://www.repository.cam.ac.uk/handle/1810/254706
- M.J. Turner, *Shell Coding of 3D Image Sets*, Extended Abstract and Poster Display in Proceedings. Data Compression Conference, March 1994. IEEE Computer Society Press ISBN: 0-8186-5637-9. pp 518.
- M.J. Turner, *Entropy Reduction via Simplified Image Contourization* Space and Earth Science Data Compression Workshop, March 1992 NASA Conference Publication Number 3183 pp 27-42
- ...also under the same title an Extended Abstract and Poster Display in Proceedings. Data Compression Conference, March 1992. IEEE Computer Society Press ISBN: 0-8186-2818-4. pp 398.
- M.J. Turner, *ICEBERG - Grey Scale Image Compression Scheme* Part II, Computer Science Tripos. Dissertation, Cambridge University, Computer Laboratory, New Museums Site, Pembroke Street, CB2 3QG. United Kingdom. 1990.

Reviewed 23 books, mainly for Computer Graphics Forum, the journal of Eurographics and AXIS (formally University Computing), UCISA Journal of Academic Computing and Information Systems. CSAR Focus Article: *The development of the new NWSC Passive Stereo Facility and the Rise of "Presence"* Mary McDerby and Martin Turner, OMII-UK Newsletter article June 2008 *The Need for an Access Grid Portlet* M.J. Turner and PASS education site with Spanish translation: http://www.matematicalia.net/index.php?option=com_content&task=view&id=137&Itemid=107

Main External Keynotes, Presentations and Invited Talks

- MEW (Machine Evaluation Workshop / CIUK x2) and tier 2 Computing at University of Sheffield "Visualisation Matters" 2014-16
- Guest Speaker at Dublin Institute of Technology: 'Access Grid Research Environment: Building a Better Networked e-Infrastructure', February 2012
- EU KE (Knowledge Exchange workshop http://www.knowledge-exchange.info) presentation madness session, Virtual Research Environments – Catalysts of Change, Birmingham 17–18 November 2011
- e-Dance Project was selected, showcasing how close collaboration between technology researchers enables arts and humanities researchers, to break new ground playing with time and space. British Library's major exhibition on how digital tools are already transforming how we do research: Growing Knowledge: The Evolution of Research (12 October 2010 – 16 July 2011).
- Panel member DRHA workshop at Cambridge, "Engaged with e-infrastructure services and resources in the arts", September 2010
- New Scientist commentary on "Mandelbulb: first 'true' 3D image of famous fractal", 18 November 2009 http://www.newscientist.com/article/dn18171-the-mandelbulb-first-true-3d-image-of-famous-fractal.html

- NESC Workshop, Eds Julie Tolmie and Stuart Dunn, Edinburgh (30 Sep – 1 Oct 2009) Mapping Information with and without Geography: Approaches to Data Visualization and Structure in the Arts, Humanities and Social Sciences "Techniques to add Visual Insight and Analytics to Geographical Visualization"
- Research Methods Festival ESRC 30th June – 3rd July 2008 "Data/Information Visualization and Visual Analytics", WT Hewitt, K Brodlie, J Walton, J Roberts, M Turner
- Keynote ICCCE'08 *Making High-end Visualization be in tune with High-end Parallel Computation* International Conference on Computer and Communication Engineering, 13th-15th May 2008 Kuala Lumpur, Malaysia
- VizNET presentations: Annual Meeting at Loughborough 2007, 2008 and 2009 and specialist meeting at Daresbury 2007 and MEW20 2009 and e-Science awareness day 1st May 2007 at the University of Manchester.
- Invited Talks at Durham, February 2007 *Scientific Visualization Problems: Why we can not see - reasons the human visual system is both excellent and also very very bad* and Bangor talk *10 reasons why we can not see: or why the eye is really really good but the brain is just okay* November 2004
- Bailey, H., Turner, M. (2006) Stereobodies 15-minute distributed dance work integrating stereoscopic video, practice-led performance at DRHA 2006 "Stereo Bodies – Stereoscopic Choreography" Dartington College. Incorporated a Stereoscopic Road-Trip; De Montfort University, Southampton, International Stereoscopic Union Conference, Eastbourne, e-Science all-hands Meeting, Nottingham; 15-22 Sep 2005
- AHRB abstract - DRH 2005, "Gated gardens? Virtual Research Environments and cross-disciplinary challenges for e-Research" *The Silchester VRE* Prof. M.J. Fulford, University of Reading Michael Rains, York Archaeological Trust; *Development of the art of scientific visualization 'presence' towards designing the next generation of human interactive conferencing and performance environment* Dr. Martin Turner, University of Manchester; *Establishing a VRE in the humanities* Dr. Mark Knights and Simon Hodson, University of East Anglia; *Building a humanities VRE* Prof. Alan Bowman and Dr. Charles Crowther, University of Oxford; September 2005
- Commercial Software Network: "The Human Visual System" *Martin Turner* November 2 2004– AVS+UNIRAS User Group Meeting Annual Conference Easthampstead Park Conference Centre, Wokingham, Berkshire *A Simple Journey of the Photon to a Human Visual Concept*
- Radio 4 Broadcasting House Interview, Sunday 13 May 2001 By BH reporter Dan Damon "*One reason many people are thought to be reluctant to vote in the general election is the feeling they have that so much power lies either in the hands of transnational corporations or beyond anyone's reach: there's nothing any of our politicians can do to make a difference. Financial markets rule our lives, in a chaotic and unpredictable way. Chaos theory, though, says apparently unconnected events do form a pattern, and a group of physicists in New Mexico decided they could apply the theory to chaotic financial markets and try to make predictions. As Dan Damon reports, they claim to have turned a profit, and opened the way for the application of chaos theory to much more than markets"*
- EGUK Chapter Conference Promotional presentations:
    - 19th Eurographics UK Conference, UCL 3-5 April 2001
    - Eurographics 2001 Manchester 4-7 September 2001
- Invited Talks on Fractal Geometry:
    - in USA 17-19 January 2001 IMA Minisymposium: Fractals in Multimedia *"On the Statistics of Dimension: Multifractals and Fractal Modulation"* (main author Jonathan Blackledge) Organisers Michael Barnsley (University of Melbourne), Edward Vrscay (University of Waterloo) Dietmar Saupe (Uni. Leipzig) http://www.ima.umn.edu/multimedia/winter/ms.html Institute for Mathematics and its Applications, University of Minnesota.
    - in Canada; 11-14 November 2000 *"Issues Relating to Fractal Segmentation of Natural Phenomenal; including Synthetic Aperture Radar, Weather Patterns, Porous Silicon and Cell Boundaries"* Fractals and Modeling in Structural and Dynamical Analysis. Centre de recherches mathématiques Montréal, Québec, Canada. Organisers: Jacques Bélair and Fahima Nekka (Montréal)
    - and in London; SIRA IIP (Intelligent Imaging Programme) held at the Society of Chemical Industry - London, 16th General Meeting 10 June 1998. *Fractal Geometry in Digital Imaging*

- 3rd UK/Russia High Technology Working Group (St Petersburg, Russia) 26-28 September 2000 Include a two day seminar on IPR and Russian Technology (26-27 September 2000) *De Montfort University Links with Russia*
- Invited presentation: Military University of Technology, Warsaw, Poland. 22 May 2000, Cybernetic Faculty *Compression Conscious Operations within Coding Systems*
- International Program European Initiative *Signal and Image Processing at the Institute of Simulation Sciences (iSS) "Intelligence within Coding Systems"* 7 September 1999 Katholieke Hogeschool Brugge-Oostende organised by Dr Hugo Tassignon.
- Demos at *Proceedings of the UK e-Science All Hands Meeting*, 2007-08 “The Portal Access Grid project has developed a fully-functional portlet client for the Access Grid Toolkit (AGTk)”, “Collaborative Research Environment on the Web (CREW) is an event recording and replay system using and developing Access Grid technologies.” and series of JISC Annual Conference demos “CSAGE”