

Handbook of the Mathematics of the Arts and Sciences

<input type="text" value="Search chapter"/> <input type="button" value="Q"/>			<input type="button" value="Show Filter"/>	<input type="button" value="Hide Pie Chart"/>
Introduction Section Editor: Professor Bharath Sriraman				
On the mathematics of the arts and sciences (/container/contribute.jsf?id=121596) Sriraman, B.	2019-11-01 (submission)	Open for Submission		
Mathematics and Architecture Section Editor: Professor Michael J. Ostwald				
Baroque Architecture (/container/contribute.jsf?id=121717) Duvernoy, S.		Published and Open for Update		
Classical Greek and Roman Architecture: Examples and Typologies (/container/contribute.jsf?id=127021) Duvernoy, S.		Published and Open for Update		
Classical Greek and Roman Architecture: Mathematical Theories and Concepts (/container/contribute.jsf?id=127022) Duvernoy, S.		Published and Open for Update		
Egyptian Architecture and Mathematics (/container/contribute.jsf?id=125989) Rossi, C.		Published and Open for Update		

Fractal Dimensions in Architecture: Measuring the Characteristic Complexity of Buildings (/container/contribute.jsf?id=121720) Ostwald, M. , Vaughan, J.		Published and Open for Update
Fractal Geometry in Architecture (/container/contribute.jsf?id=121719) Vaughan, J. , Ostwald, M.		Published and Open for Update
Gothic Architecture and Mathematics (/container/contribute.jsf?id=138108) Lluís i Ginovart, J. , López Piquer, M.	2019-04-01 (submission)	Open for Submission
Isovists: Spatio-Visual Mathematics in Architecture (/container/contribute.jsf?id=121713) Ostwald, M. , Dawes, M.		Published and Open for Update
Labyrinth (/container/contribute.jsf?id=121712) Morrison, T.		Published and Open for Update
Parametric Design: Theoretical Development and Algorithmic Foundation for Design Generation in Architecture (/container/contribute.jsf?id=121716) Gu, N. , Yu, R., Behbahani, P.		Published and Open for Update
Renaissance Architecture (/container/contribute.jsf?id=121718) Duvernoy, S.		Published and Open for Update
Shape Grammars: A Key Generative Design Algorithm (/container/contribute.jsf?id=121715) Gu, N. , Behbahani, P.		Published and Open for Update
Space Syntax: Mathematics and the Social Logic of Architecture (/container/contribute.jsf?id=121714) Dawes, M. , Ostwald, M.		Published and Open for Update

Stereotomy: Architecture and Mathematics (/container/contribute.jsf?id=138109) Fallacara, G., Gadaleta, R.	2019-03-23 (revision)	Revision Requested
Temple of Solomon (/container/contribute.jsf?id=121711) Morrison, T.		Published and Open for Update
Tessellation and Tiling in Architecture (/container/contribute.jsf?id=138110) Ostwald, M.		In Production
Utopian Cities (/container/contribute.jsf?id=121710) Morrison, T.		Published and Open for Update
Mathematics, Science and Dynamical Systems Section Editors: Torsten Lindström, Professor Bharath Sriraman		
Anomaly detection in Nature (/container/contribute.jsf?id=141759) Sanz, V.	2020-04-01 (submission)	Open for Submission
Applications of ergodic theory and (measurable and symbolic) dynamical systems (/container/contribute.jsf?id=123244) Comez, D.	2019-03-24 (revision)	Revision Requested
Coevolution of Mathematics, Statistics, and Genetics (/container/contribute.jsf?id=123241) Yoo, Y.		Published and Open for Update
Damped dynamical systems for solving equations and optimization problems (/container/contribute.jsf?id=123245) Gulliksson, M., Ögren, M., Zhang, Y., Oleynik, A.		In Production
Dynamical systems and fitness maximization in biology (/container/contribute.jsf?id=143097)	2019-12-01 (submission)	Open for Submission

Basener, W. , Sanford, J.		
Interdisciplinary Mathematics and Sciences in Schematic Ocean Current Maps in the Seas Around Korea (/container/contribute.jsf?id=123250) Park, K. , Park, J., Park, J., Choi, B., Lee, S., Byun, D., Lee, E., Kang, B., Shin, H.,...		Published and Open for Update
Limit cycles in planar systems of ordinary differential equations (/container/contribute.jsf?id=123247) Lindström, T.	2020-12-01 (submission)	Open for Submission
Mathematical Models Can Predict the Spread of an Invasive Species (/container/contribute.jsf?id=123435) Alford, J.		In Production
Mathematics and Climate Change (/container/contribute.jsf?id=123436) Lohmann, G.	2019-04-01 (submission)	Open for Submission
Mathematics and Recurrent Population Outbreaks (/container/contribute.jsf?id=123246) Lindström, T.		Published and Open for Update
Moment closure methods in population dynamics. (/container/contribute.jsf?id=129920) Asta, A.	2019-11-01 (submission)	Open for Submission
Recent Developments in Catastrophe Theory (/container/contribute.jsf?id=139767) Stewart, I.	2019-12-01 (submission)	Open for Submission
Topology in Biological Systems (/container/contribute.jsf?id=138290) Sizemore, A. , Bassett, D.	2019-11-15 (submission)	Open for Submission
Two way thermodynamics (/container/contribute.jsf?id=139766)	2020-10-01	

Schulman, L.	(submission)	Open for Submission
Visualising four dimensions in special and general relativity (/container/contribute.jsf?id=142296) Kersting, M.	2019-11-01 (submission)	Open for Submission
Mathematics, Humanities and the Language Arts Section Editors: Gizem Karaali, Professor Bharath Sriraman		
"Elegance in Design": Mathematical Scaffolding in the Works of Ted Chiang (/container/contribute.jsf?id=123430) Sklar, J.	2019-04-01 (revision)	Revision Requested
A massive mountain in Aleksis Kivi's play Kullervo: a sublime experience? (/container/contribute.jsf?id=123427) Kukkonen, T.		In Review
Beauty is in the blind spot of the beholder (/container/contribute.jsf?id=139764) Aharoni, R.	2019-12-01 (submission)	Open for Submission
Mathematical pattern poetry: from past to present (/container/contribute.jsf?id=139765) Glaz, S.	2019-12-01 (submission)	Open for Submission
Mathematics and language (/container/contribute.jsf?id=139373) Silver, D.	2019-11-01 (submission)	Open for Submission
Mathematics and Poetry (/container/contribute.jsf?id=123428) Karaali, G.	2019-06-01 (submission)	Open for Submission
Mathematics and Theater: Beckett (/container/contribute.jsf?id=123425) Abbott, S.	2019-11-30 (submission)	Open for Submission

Poems Structured by Mathematics (/container/contribute.jsf?id=140775) May, D.	2019-12-01 (submission)	Open for Submission
Running in Shackles: The Information-Theoretic Paradoxes of Poetry (/container/contribute.jsf?id=123440) Manin, D.		Published and Open for Update
The Poetry of Mathematics and the Mathematics of Poetry (/container/contribute.jsf?id=139929) Caraman, S. , Caraman, L.	2019-09-01 (submission)	Open for Submission
Mathematics, Art and Aesthetics Section Editors: Professor Bharath Sriraman, Professor Kyeong-Hwa Lee		
A Hidden Order: Revealing the Bonds Between Music and Geometric Art – Part One (/container/contribute.jsf?id=123038) Mara, S. , Westwood, L.		Published and Open for Update
A Hidden Order: Revealing the Bonds Between Music and Geometric Art – Part Two (/container/contribute.jsf?id=123039) Westwood, L., Mara, S.		Published and Open for Update
A New Dawn: the Relevance of Historical Design Methodologies to the Creation of Contemporary Islamic Geometric Art (/container/contribute.jsf? id=142295) Bonner, J.	2019-04-01 (submission)	Open for Submission
A Survey of Cellular Automata in Fiber Arts (/container/contribute.jsf? id=123439) Holden, J. , Holden, L.		In Production
Aesthetics of Knots in Modern Art and Architecture (/container/contribute.jsf?id=123047)	2019-05-01 (submission)	Open for Submission

Kozlov, D.		
Almost all surfaces are made out of hexagons (/container/contribute.jsf?id=139930) Baik, H.	2019-11-01 (revision)	Revision Requested
Anamorphosis (/container/contribute.jsf?id=139759) Araújo, A.	2019-11-01 (submission)	Open for Submission
Anamorphosis: Between Perspective and Catopritics (/container/contribute.jsf?id=123403) De Rosa, A. , Bortot, A.		In Production
Art and Science of Rope (/container/contribute.jsf?id=123035) Åström, A. , Åström, C.		Published and Open for Update
Artistic surprises from integers (/container/contribute.jsf?id=139370) Estrada, E.	2019-11-01 (submission)	Open for Submission
Comparative Temple Geometries (/container/contribute.jsf?id=123043) Mcgonigal, K.	2019-03-07 (revision)	Revision Requested
Connecting the Mathematics of Polyhedra and Tilings with Art (/container/contribute.jsf?id=137918) Malkevitch, J.	2019-06-01 (submission)	Open for Submission
Cutting, gluing, squeezing and twisting - visual design of real algebraic surfaces (/container/contribute.jsf?id=142022) Klaus, S.	2019-06-01 (submission)	Open for Submission
Eight-Pointed Stars and Pythagorean Triangles (/container/contribute.jsf?id=123046) Kozlov, D.	2019-05-01 (submission)	Open for Submission

Geometric and Aesthetic Concepts Based on Pentagonal Structures (/container/contribute.jsf?id=123041) Leopold, C.		Update: In Production
Geometries of Light and Shadows, from Piero della Francesca to James Turrell (/container/contribute.jsf?id=122974) De Rosa, A. , Bergamo, F.		Published and Open for Update
Homeomorphisms Between the Circular Disc and the Square (/container/contribute.jsf?id=123048) Fong, C.		Published and Open for Update
Korean Traditional Patterns: Frieze and Wallpaper (/container/contribute.jsf?id=123037) Shin, H. , Sheen, S., Kwon, H., Mun, T.		Published and Open for Update
Looking Through the Glass (/container/contribute.jsf?id=123424) Crannell, A.		In Production
Mathematical Design for Knotted Textiles (/container/contribute.jsf?id=123404) Nimkulrat, N. , Nurmi, T.		Published and Open for Update
Mathematics and Origami: The Art and Science of Folds (/container/contribute.jsf?id=122968) Budinski, N.		Update: In Production
On the reciprocal influence of mathematical cosmos representations and artistic creation (/container/contribute.jsf?id=143345) Perez, J. , Gannac, V.	2019-09-01 (submission)	Open for Submission
Origami-inspired light art and mathematics (/container/contribute.jsf?	2019-09-01	

id=139760) Wu, J.	(submission)	Open for Submission
Projections of Knots and Links (/container/contribute.jsf?id=123036) Åström, A. , Åström, C.		Published and Open for Update
Sacred Geometry (/container/contribute.jsf?id=123045) Karaali, G.	2019-06-01 (submission)	Open for Submission
Spherical perspective (/container/contribute.jsf?id=139758) Araújo, A.	2019-11-01 (submission)	Open for Submission
The Beauty of Complex Functions (/container/contribute.jsf?id=138291) Gorkin, P. , Daepf, U., Semmler, G., Wegert, E.	2019-11-01 (submission)	Open for Submission
The Relation Between Multi-layered Surfaces, Polyhedra and Weaving (/container/contribute.jsf?id=123044) Roelofs, R.	2019-04-07 (submission)	Open for Submission
<i>TOND</i> to <i>TOND</i> : Self-Similarity of Persian <i>TOND</i> Patterns, Through the Logic of the X-Tiles (/container/contribute.jsf?id=126326) Castera, J.		Update: In Production
Wasan Geometry (/container/contribute.jsf?id=143344) Okumura, H.	2019-09-01 (submission)	Open for Submission
Mathematics, History and Philosophy Section Editor: Professor Bharath Sriraman		
Ancient Methods of Measuring Astronomical Sizes (/container/contribute.jsf?id=131394) Clinch, A. , Sriraman, B.	2019-11-01 (submission)	Open for Submission

Folding and Geometry from the 15th century (/container/contribute.jsf?id=138295) Friedman, M.	2019-11-01 (submission)	Open for Submission
Islamic design and its relation to Mathematics (/container/contribute.jsf?id=138294) Wade, D., Wichmann, B.		In Production
Leonhard Euler between mathematics and natural philosophy: Anleitung zur Naturlehre (/container/contribute.jsf?id=139973) Capecchi, D.	2019-11-01 (submission)	Open for Submission
Mathematical Explanations and Mathematical Applications (/container/contribute.jsf?id=123243) Pantsar, M.		Published and Open for Update
Nyaya Methodology and Western Mathematical Logic: Origins and Implications (/container/contribute.jsf?id=131342) Schmidt, M., Sriraman, B.		Published and Open for Update
Reception and Contestation: Mathematics and Esoteric Spirituality, 1875-1915 (/container/contribute.jsf?id=139381) Valente, K.	2019-09-30 (submission)	Open for Submission
Space and Time in the Foundations of Mathematics, or some challenges in the interactions with other sciences (/container/contribute.jsf?id=141647) Longo, G.	2019-11-01 (submission)	Open for Submission
The Cross-cultural Aspects of the Wheat and Chessboard Problem (/container/contribute.jsf?id=137500) Bardi, A.	2019-04-01 (submission)	Open for Submission
The mathematical Baroqueian folds: between metaphor and the	2019-11-01	

mathematics to come (/container/contribute.jsf?id=138296) Friedman, M.	(submission)	Open for Submission
Writing the history of mathematics - interpretations of the mathematics of the past and its relation to the mathematics of today (/container/contribute.jsf?id=129583) Pejlare, J. , Bråting, K.	2019-03-14 (revision)	Revision Requested
Mathematics in Society Section Editor: Professor Bharath Sriraman		
A Computational Music Theory of Everything - Dream or Project? (/container/contribute.jsf?id=138293) Mazzola, G.		In Production
Actuarial (Mathematical) Modeling of Mortality and Survival Curves (/container/contribute.jsf?id=133151) Brockett, P. , Zhang, Y.	2019-04-01 (submission)	Open for Submission
Applications of the Gini index beyond economics and statistics (/container/contribute.jsf?id=139761) Zizler, P. , La Haye, R.	2019-11-01 (submission)	Open for Submission
Aspects of statistics and the law (/container/contribute.jsf?id=139371) Gray, M.	2019-11-01 (submission)	Open for Submission
Breaking the ice: Figure skating (/container/contribute.jsf?id=123434) Cheng, D.		In Production
Gilles Deleuze's The Fold: Calculus and Curvilinear Design (/container/contribute.jsf?id=139762) Hubregtse, M.	2019-11-01 (submission)	Open for Submission

Mathematical Games (/container/contribute.jsf?id=140808) Nowakowski, R.	2019-04-01 (submission)	Open for Submission
Mathematics and Economics/ Social Choice Theory (/container/contribute.jsf?id=123431) Salles, M.	2019-05-01 (submission)	Open for Submission
Mathematics and Wine (/container/contribute.jsf?id=131556) Cadeddu, L. , De Marchi, S., Cauli, A.		In Production
Music, Dance, and Differential Equations (/container/contribute.jsf?id=140807) Koss, L.	2019-12-01 (submission)	Open for Submission
Navigation: from celestial sights to GPS and back (/container/contribute.jsf?id=145078) Myers, D.	2019-11-01 (submission)	Open for Submission
Probabilistic Thinking from Elementary Grades to Graduate School (/container/contribute.jsf?id=123432) Beam, J.		Published and Open for Update
Risk and decision making - Modelling and statistics in medicine (/container/contribute.jsf?id=127199) Borovcnik, M.	2019-04-01 (submission)	Open for Submission
Social Algorithms and Optimization (/container/contribute.jsf?id=139763) Yang, X.	2019-06-01 (submission)	Open for Submission
Sporthematics: Approaches to Learning (/container/contribute.jsf?id=123433) Berezovski, T. , Berezovski, A.	2019-12-01 (submission)	Open for Submission

Topology of Cities (/container/contribute.jsf?id=125376) Brelsford, C. , Martin, T.		In Review
Towards a theoretical model of rhythm (/container/contribute.jsf?id=139372) Waadeland, C.	2019-11-01 (submission)	Open for Submission
Mathematical Influences and New Directions Section Editor: Professor Ken Valente		
Cognition, interdisciplinarity, and equity (/container/contribute.jsf?id=136445) Adiredja, A.	2019-05-01 (submission)	Open for Submission
Ethnomathematics (/container/contribute.jsf?id=136447) Furuto, L.	2019-05-01 (submission)	Open for Submission
Ethnomodelling as the Translation of Diverse Cultural Mathematical Practices (/container/contribute.jsf?id=136439) Rosa, M. , Orey, D.		In Review
Intersectional mathematics (/container/contribute.jsf?id=136448) Leyva, L.	2019-05-01 (submission)	Open for Submission
Mathematical influences in film and / or television (/container/contribute.jsf?id=136450) Sklar, J. , Nordstom, J.	2019-05-01 (submission)	Open for Submission
Mathematics and feminist theory (/container/contribute.jsf?id=136449) McGuire, L.	2019-05-01 (submission)	Open for Submission
Mathematics and modes of public scholarship (/container/contribute.jsf?id=137210)	2019-05-01 (submission)	Open for Submission

Thompson, K.		
Mathematics and Rhetoric (/container/contribute.jsf?id=136602) Reyes, M.	2019-05-01 (submission)	Open for Submission
Mathematics and social justice (/container/contribute.jsf?id=136446) Alexander, N.	2019-05-01 (submission)	Open for Submission
Modes and modalities of mathematical authority: Disseminating the 'new infinite' (/container/contribute.jsf?id=139382) Valente, K.	2019-09-30 (submission)	Open for Submission
Moral mathematics (/container/contribute.jsf?id=136451) Voss, S.	2019-05-01 (submission)	Open for Submission
Queer(y)ing Mathematical Knowledge (/container/contribute.jsf?id=136440) Valente, K.	2019-09-30 (submission)	Open for Submission
<input type="checkbox"/> Show dormant and rejected chapters	1 - 113 of 113	