

I. President's Foreword



Dear members and friends of the Society,

It is my pleasure and honor to welcome the members and friends of the SMCM in this 2020 newsletter.

I want to second the congratulations to Thomas Fiore for his uniquely creative and precise and efficient work as the JMM's coeditor-in-chief (co-EIC). I also welcome the

new co-EIC Emmanuel Amiot, who joins co-EIC Jason Yust. My gratitude also goes to the new reviews editor Moreno Andreatta, who continues the work of Jon Wild. Thank you so much, this is essential work and engagement for our very important journal. I am also grateful for the organizers of the 2019 Biennial Conference which took place at the Universidad Politécnica de Madrid and the Real Conservatorio Superior de Música de Madrid. Mariana Montiel, Francisco Gómez-Martín and Octavio Alberto Agustín-Aquino have done a great job. And Mariana Montiel is now also organizing the next Biannial Conference 2021 at Georgia State University. My warmest thanks to her singular initiative.

We can also be satisfied by the new books, which prove that our field is strongly alive. Several important books to be written by very productive and creative society members are planned, we will for sure have some of them published when the society meets end of June 2021 in Atlanta.

We are all aware of the increasing extension of music and performance theory, especially within the educational environments of our universities, to technology-enhanced fields, also in view of the Al hype, to which our efforts have contributed many basic methods and results. We recognize the fundamental role of intelligent theories that we can contribute to a substantial deepening of music science, thank you all for your great work.

Guerino Mazzola President, SMCM

2. Membership Renewal and Treasurer's Report

Journal of Mathematics and Music is getting caught up, under the editorship of Emmanuel Amiot and Jason Yust. Renew your membership and subscribe to the current 2019 issue, the 2020 issue, or both (for 10% off).

David Clampitt Treasurer, SMCM

3. The Journal of Mathematics and Music

The Journal of Mathematics and Music is happy to report that after our publication of this year's Special Issue on Geometry and Topology in Music as the fall issue (vol. 13/3) we will be essentially back on schedule with publication. Be on the lookout for this issue in a couple months: with contributions from Mattia Bergomi, Dmitri Tymoczko, and Jason Yust, it is sure to mark an important advancement in the field.

Last year's Special Issue on Music and Combinatorics on Words (12/3) was a true monument to the topic, with multiple contributions from Thomas Noll and David Clampitt, and Jean-Paul Allouche, and also Norman Carey, Lorraine Ayad, Marc Chemillier, Solon Pissis, and Tom Johnson, edited by Srecko Brlek, Marc Chemillier, and Christophe Reutenauer. Running to 139 pages, it is a fitting capstone to Thomas Fiore's tenure as co-editor-in-chief.

In addition, we have published on a wide range of topics in our regular issues (13/1 and 13/2, currently in press). More material forthcoming for vol. 14 is already published on the website. We are encouraged by the breadth of methodologies, musical repertoires, and nationalities of our authors, represented by the research we are currently publishing, and we hope to continue this trend in the future. It is certainly a good sign for the health of our journal and of the field at large that we are able to embrace this diversity and overlap with so many different disciplines.

We cannot express enough our gratitude to Thomas Fiore for his service to the journal, having served six years (2013–2018) as co-editor-in-chief alongside three other co-editors-in-chief.

He was instrumental in keeping the journal smoothly and set a high standard of excellence for the journal, in the material published and the quality of reviewing and editing, and set it up for success after he has moved on from the co-EIC position. We also welcome Emmanuel Amiot as the new co-EIC this year. He has already contributed a great deal of excellent work to JMM as author and as Assistant Editor, and now as co-EIC. We also welcome Moreno Andreatta, who will be taking over from Jon Wild as reviews editor for the journal. There are a lot of important books being published in our area, so we hope to start seeing more reviews in JMM's pages soon.

We are currently searching for new assistant editors, and any recommendations are welcome.

For next year's special issue (2020) we have made an eleventhhour decision to organize a special issue on Mathematics and Musical Rhythm, as a memorial tribute to Godfried Toussaint, who passed away this past summer, and was such an important part of our community. We are currently soliciting material for this issue. As there is an embarrassment of riches in this area, we are hopeful of being able to put together a great collection for this. Nonetheless any suggestions for authors to invite are welcome. In particular, brief personal items about Godfried may be appropriate to include alongside the scholarly articles. Most importantly, we have not yet identified guest editors for this issue, so we would especially welcome any suggestions (or volunteers!) for possible guest editors. You can make your communications to Jason Yust (jason.yust@gmail.com).

Also, as always, please be on the watch for scholars doing work in mathematics and music who might be unaware of our journal or might not have considered submitting, and tell them to send us their work! The strength of our journal depends upon the strength of our base of submissions, and our journal is also a resource to potential authors that they should know about. Good ambassadors for the journal is one of the most valuable things we can have.

4. The Society's 2019 Biennial Conference

From June 18-21 the seventh MCM (Mathematics and Computation in Music) conference was celebrated in Madrid, Spain at the Universidad Politécnica de Madrid and the Real Conservatorio Superior de Música de Madrid. The conference and scientific program were organized by Mariana Montiel, Francisco Gómez-Martín and Octavio Alberto Agustín-Aquino. Forty-eight submissions were received, out of which twentytwo long papers were accepted (eight belonging to the special session on Riemann organized by Thomas Noll), as well as five short papers corresponding to posters, and six short papers corresponding to the special session on pedagogy in mathematical music theory. All papers were reviewed by multiple reviewers, and the submissions came from more than ten countries and four continents.

The sessions were grouped under (i) Algebraic and Other Abstract Mathematical Approaches to Understanding Musical Objects; (ii) Special Session: Remanaging Riemann: Mathematical Music Theory as Experimental Philology; (iii) Octave Division; (iv) Computer Based Approaches to Composition and Score Structuring; (v) Models for Music Cognition and Beat Tracking; (vi) Tilings, Canons and Maximal Evenness; (vii) Special Session: Pedagogy in Mathematical Music Theory. Information about the proceedings, published by Springer, is available at https://link.springer.com/book/ 10.1007%2F978-3-030-21392-3.

The long papers corresponded to half-hour talks, the short papers to posters and to the special session on pedagogy. These presentations were carried out at the Universidad Politécnica de Madrid from 9am-3pm each of the four days. During the coffee break there was also an opportunity for the participants to familiarize themselves with the LaLaLab Math and Music exhibition. At 5pm each day, the participants then went to the Real Conservatorio Superior de Música de Madrid for the four plenary talks given by Guerino Mazzola, Octavio Alberto Agustín-Aquino, Emmanuel Amiot and Francisco Gómez-Martín, and the concerts.

The three concerts open to the public were offered after the plenary talks by actual participants in the scientific program of the conference. The performers were: (i) Moreno Andreatta (music) and Gilles Baroin (visuals), Math'n Pop Concert or How to turn a Poem into a Song (with a little help of mathematics); (ii) Naoki Kita (violin), Guerino Mazzola (piano) and Heinz Geisser (drums), MA - Music of Change; (iii) Emilio Lluis-Puebla (piano) and Octavio Agustín-Aquino (guitar), Integral of Diabelli's Piano and Guitar. The fourth evening the participants ended the conference with a gala dinner planned by the organizers at a typical Spanish restaurant.

5. The Society's 2021 Biennial Conference

The MCM 2021 conference will take place in Atlanta, GA at Georgia State University (GSU). Georgia State has experience hosting several events related to mathematical music theory in the past years. The growing collaboration between the Department of Mathematics and Statistics, and the School of Music at GSU, has contributed to creating recognition for our discipline.

The Department of Mathematics and Statistics at GSU will take care of the MCM 2021 website, which will include the possibility of paying the registration online. All the information, with deadlines for submissions, hotels, etc., will be available by June of 2020, if not before. Indeed, GSU has arrangements for special rates at several of the quality hotels that surround the university, which is an urban university setting. Both scientific and artistic programs will be held within walking distance.

The proceedings will be published by Springer, as in the past. We are open to suggestions and anyone that wishes to participate on the organization or scientific committees, or who has ideas for the programming, please contact Mariana Montiel (mmontiel@gsu.edu).

5. Outreach Activities

At the final plenary session of MCM 2019, it was decided that it is important to increase outreach efforts. In response, at MCM 2021 we hope to put on a public outreach day at a local science museum. The goals will be to (1) engage the general public in our areas of interest and (2) demonstrate to each other how to implement effective outreach events.

We will seek talks, posters, performances, and activities that help attendees ("laypeople") appreciate the role that mathematics and computation can play in enhancing their personal enjoyment and/or understanding of music. Ideally attendees will come away from the event with artefacts of their experiences. For example, one activity may have attendees composing music with the aid of software. In this case, MIDI renditions of those compositions could be posted on the conference website, which could then be shared by attendees on social media.

The format and schedule of the event will depend on the submissions that are accepted, and the venue chosen. While we are not ready to accept submissions at this point, we encourage you to be thinking about and developing suitable activities.

6. Publications and Music Releases

Books

Theoretical and Practical Pedagogy of Mathematical Music Theory Music for Mathematics and Mathematics for Music, From School to Postgraduate Levels. Edited By: Mariana Montiel (Georgia State University, USA) and Francisco Gómez (Universidad Politécnica de Madrid, Spain)

https://doi.org/10.1142/10665 | December 2018 - Pages: 324

Algebraic, Geometric, Combinatorial, Topological and Applied Approaches to Understanding Musical Phenomena. Edited By: Mariana Montiel (Georgia State University, USA) and Robert W Peck (Louisiana State University, USA)

https://doi.org/10.1142/10858 | December 2018 - Pages: 372.

The Topos of Music, 2nd edition. Springer, Heidelberg.

Vol I: Theory. Guerino Mazzola (University of Minnesota, USA). https://doi.org/10.1007/978-3-319-64364-9 | March 2018 - Pages: 656.

Vol II: Performance Guerino Mazzola (University of Minnesota, USA). https://doi.org/10.1007/978-3-319-64444-8 | March 2018 - Pages: 408.x

Vol. III: Gestures. Guerino Mazzola (University of Minnesota, USA), René Guitart (Université Didérot Paris 7, FR), Jocelyn Ho (UCLA Herb Alpert School of Music, USA), Alex Lubet (University of Minnesota, USA), Maria Mannone (University of Minnesota, USA), Matt Rahaim (University of Minnesota, USA), and Florian Thalmann (Queen Mary University of London, UK). https://doi.org/10.1007/978-3-319-64481-3 | March 2018 - Pages: 604.

Vol. IV: Roots. Guerino Mazzola (University of Minnesota, USA) https://doi.org/10.1007/978-3-319-64495-0 | March 2018 - Pages: 325.



CDs

Guerino Mazzola, Alex Lubet: Deep State. pfMentum PFMCD1119

Guerino Mazzola, Heinz Geisser: *Live at Le Classique*. pfMentum PFMCD126

Guerino Mazzola, Naoki Kita, *Heinz Geisser*. Ma. pfMentum PFM116

Guerino Mazzola, Katie Hae Leo, Alex Lubet, Nick Zielinski, James E. Holdman. *Negative Space*. pfMentum PFMCD136



About Us

The Society for Mathematics and Computation in Music (SMCM) was founded in 2006 as an international forum for researchers and musicians working in the trans-disciplinary field at the intersection of music, mathematics and computation. The SMCM is registered in the USA. At its inaugural meeting in Berlin, on May 20, 2007, 13 board members were elected, from which were selected the officers for the society. The official website of the Society can be found at *www.smcm-net.info*.

To become an accredited individual SMCM member, please visit our online registration form at www.smcm-net.info/registration.html. Membership includes a print subscription to the Journal of Mathematics and Music, the SMCM's official journal. For full information on the Journal of Mathematics and Music, a publication by Taylor & Francis, including manuscript submission instructions, library subscription options, details on free email alerting services, editorial board information and the online edition, please visit its homepage at www.tandfonline.com/loi/tmam20.

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