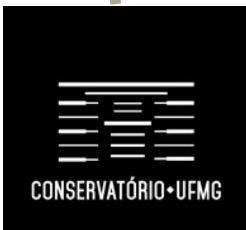
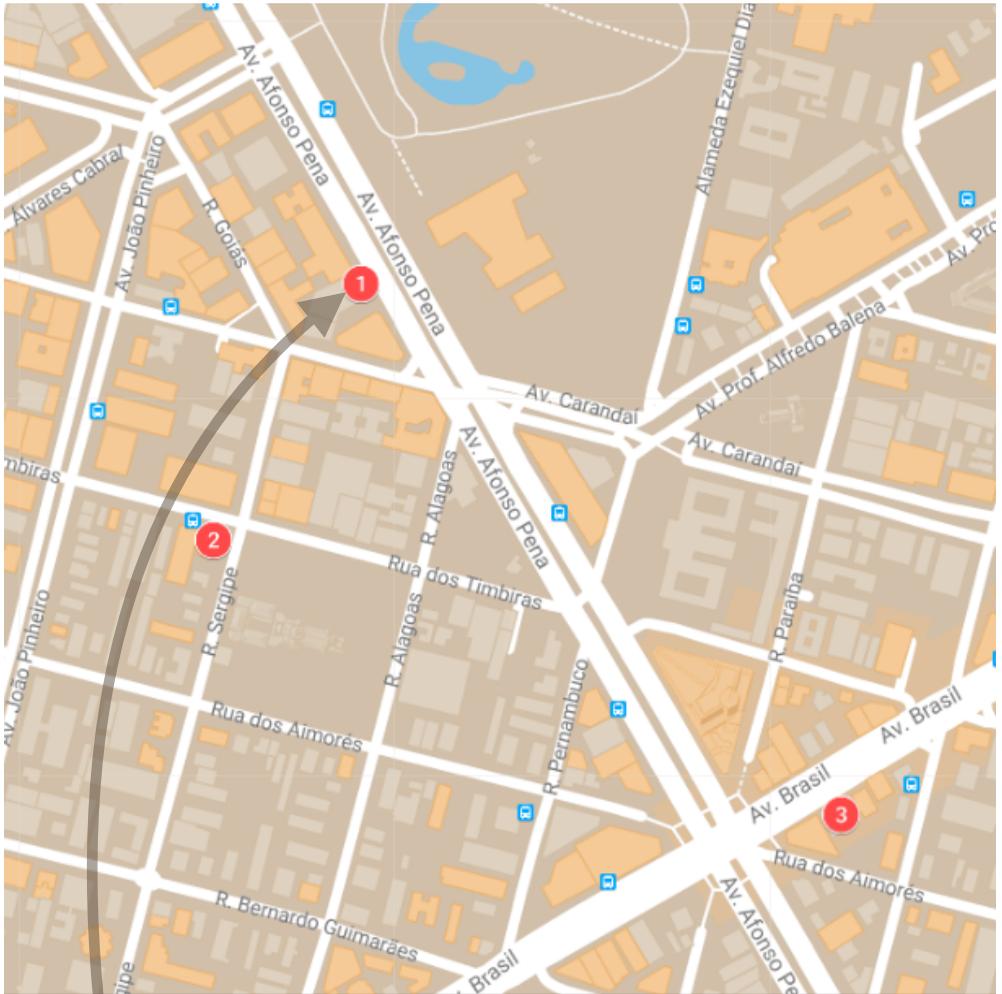


SysMus Map - Venue



The SysMus 2018 will be held in the Music Conservatory of the Federal University of Minas Gerais. Address: Avenida Afonso Pena, 1534, Centro, Belo Horizonte, MG, Brazil.

- 1 - Music Conservatory (Main Venue)
- 2 - Restaurant - Bar da Esquina
- 3 - Closing Party - Home Center Hostel

Conference Program - Overview

	June 5 (Tue)	June 6 (Wed)	June 7 (Thu)	June 8 (Fri)
Morning		09:00 Registration	09:00 Paper Session III	09:00 Paper Session VI
		09:30 Opening		
		10:30 Keynote I Juan Pablo Bello	10:30 Keynote II Andre Holzapfel	10:30 Interval 11:00 Paper Session VII
Lunchtime		12:00 Lunch Break	12:00 Lunch Break	12:00 Lunch Break
Afternoon		13:30 Paper Session I	13:30 Paper Session IV	13:30 Keynote III Mauricio Loureiro
			14:30 Interval	
		15:00 Poster Session I + Coffee Break	15:00 Poster Session II + Coffee Break	15:00 Poster Session III + Coffee Break
		16:30 Paper Session II	16:30 Paper Session V	16:30 Closing Ceremony
Evening	20:00 Welcome Meeting	17:30 Interval	17:30 Interval	17:30 Interval
			19:30 Concert	
		20:00 Roda de Choro		20:00 Closing Party / Jam Session

Access our website and social media for last-minute news about the program:

<http://musica.ufmg.br/sysmus2018>

<https://www.facebook.com/sysmus2018>

<https://twitter.com/sysmus2018>

Satellite Event:

SSMM 2018 - Southern School on Music and Movement (03 - 05, June)

<http://ssmm.co.vu>

Keynotes

PROF. DR. ANDRE HOLZAPFEL

KTH Royal Institute of Technology (Sweden)

Andre Holzapfel is Assistant Professor at the Media Technology and Interaction Design department working in the area of Sound and Music Computing (SMC). Specific research topics include the development of beat and meter tracking in musical audio signals, music corpus analysis, tempo, timing, and relation of performance to meter. His research in ethnomusicology focuses on the relation of dance and music, in particular in the island of Crete. New areas of study involve tracking of human rhythmic behavior in space, applications of music in motion capture environments for rehabilitation purposes, ethical aspects of computational approaches to music.

PROF. DR. JUAN PABLO BELLO

New York University (US)

Juan Pablo Bello is Associate Professor of Music Technology and Computer Science & Engineering at New York University. In 1998 he received a BEng in Electronics from the Universidad Simón Bolívar in Caracas, Venezuela, and in 2003 he earned a doctorate in Electronic Engineering at Queen Mary, University of London. Juan's expertise is in digital signal processing, machine listening and music information retrieval, topics that he teaches and in which he has published more than 100 papers and articles in books, journals and conference proceedings. He is director of the Music and Audio Research Lab (MARL), where he leads research on music informatics. His work has been supported by public and private institutions in Venezuela, the UK, and the US, including Frontier and CAREER awards from the National Science Foundation and a Fulbright scholar grant for multidisciplinary studies in France.

PROF. DR. MAURICIO ALVES LOUREIRO

Universidade Federal de Minas Gerais (Brazil)

Aeronautical Engineer, graduated at the Technological Institute of Aeronautics - ITA (1976) and clarinetist, graduated at the Staatliche Hochschule für Musik Freiburg, Germany (1983), under the supervision of clarinetist Dieter Klöcker. Master's and PhD degree in Music at the University of Iowa, USA (1991). First clarinet assistant at most prominent Brazilian symphony orchestra, (São Paulo State Symphony), appeared as soloist with leading Brazilian orchestras and chamber groups and as invited artist on major music festivals in Brazil. Chair of the first Brazilian Symposium on Computer Music (1994), as well as its fifth (1998) and tenth versions (2005). Associated professor of music at the State University of São Paulo - UNESP (1984-1992). Since 1992, full professor of music at the Federal University of Minas Gerais - UFMG, where directed the IEAT - Institute of Advanced Transdisciplinary Studies (2009-2014) and coordinates the research group CEGeME - Center for Studies on Musical Gesture and Expression.

Paper sessions

PAPER SESSION 1 – 6/6/2018 13:30

- **Title: Evolution of timbre diversity in a dataset of Brazilian popular music: 1950-2000**

Authors: Rodrigo Borges*, Universidade de São Paulo (USP); Marcelo Gomes de Queiroz, USP

Subject area: Systematic musicology

Abstract: In this paper we discuss a method for assessing the temporal evolution of timbre diversity in an annotated dataset, and apply it to a collection of Brazilian music from the 1950's to the 2000's. Previous work have explored audio analysis for measuring the variety of acoustic features or the stylistic evolution in American Popular Music in the period 1950-2010. We aim in this study to verify up to what point a similar methodology could be applied to a considerably different dataset (Brazilian popular music) in a comparably long period (1950-2000). The measure of timbre diversity, based on Shannon's entropy function, displays its lowest value for 1950-1955, abrupt decay from 1975 to 1990 and an increasing trend from this point until 2000.

- **Title: Effort in gestural interactions with imaginary objects in the context of Dhrupad vocal improvisation**

Authors: Stella Paschalidou*, TEI of Crete; Martin Clayton, Durham University; Tuomas Eerola, Durham University

Subject area: Systematic musicology

Abstract: The current paper reports on the exploration of relationships between physical effort and acoustic and movement descriptors on the occasions that Hindustani vocalists seem to manually interact with intangible, imaginary objects, such as through stretching, pulling, and pushing. The work combines qualitative and quantitative methods to analyse interviews, audio-visual material and mocap data of vocal performances in order to (a) estimate effort levels and (b) classify gestures (as interactions with elastic vs. rigid objects). Findings indicate that despite the flexibility in how individual vocalists may use their hands while singing, there is a certain degree of consistency in terms of cross-modal associations. Therefore, we argue that gesturing in Dhrupad singing is guided by: humans' know-how in exerting effort on real objects of the environment, the movement-sound relationships transmitted from teacher to student in oral music training and the mechanical requirements of vocalisation.

- **Title: Analysis of the sonority: an approach based upon the performance**

Authors: Bibiana Bragagnolo*, Universidade Federal da Paraíba (UFPB); Didier Guigue, UFPB

Subject area: Systematic musicology

Abstract: This research proposes a methodology of analysis of the sonority in which the performance becomes a source of information, focusing in piano pieces written by Brazilian composers. For that, our methodology, based in Guigue's analysis of the sonority (2011), includes two main elements: the analysis of recorded data with computational support and the positioning of the Artistic Research (COESSENS et al., 2009). The first element contemplates recordings of the pieces in audio and MIDI, played by the pianist and first author of this paper, that were analyzed using Sonic Visualizer and Open Music. The interpretation of this information was based on the written and performative elements of the sonority in the pieces. The analysis of the data was filtered by the performer's view, which is the main idea of the Artistic Research. The application of this methodology has already provided some consistent results in the analysis of the sonority in Ressonâncias and Contrastes, from Marisa Rezende.

- **Title: Textural layers and polyphonic timbre links in Electronic Dance Music**

Authors: María Marchiano*, Laboratorio para el Estudio de la Experiencia Musical, Universidad Nacional de La Plata (LEEM - UNLP); Isabel Cecilia Martínez, (LEEM - UNLP); Javier Dameson, (LEEM - UNLP)

Subject area: Music perception

Abstract: Polyphonic timbre refers to the overall timbral mixture in a music signal. Some of their most salient acoustic dimensions are the Sub-Band Fluxes. Our hypothesis is that there is a temporal alignment between Sub-Band Flux changes and perceived textural layers' onsets and offsets in electronic dance music (EDM). (i) We asked to 15 professional musicians to record in Reaper every perceived textural layer's onset or offset of 11 EDM's tracks, (ii) and calculated the transitional temporal data between homogeneous and successive states of Sub-Band Flux from signals with MIRTtoolbox functions. Data (i) and (ii) are being correlated. We expect that acoustical timbral changes will show temporal coincidence with perceived textural layers' onsets and offsets. Results are still in process, and will be discussed in reference to the EDM's acoustic environment to mutually afford the perception of textural layers and polyphonic timbres.

PAPER SESSION II - 6/6/2018 16:30

- **Title: Queer Aesthetics in the Performance of Paganini 'Caprices' on the Viola (Virtual)**

Authors: Kirsty Clark*, Guildhall School of Music and Drama

Subject area: Music and culture

Abstract: This paper examines interaction between music and queer identity, applying cultural theory to classical music performance. It explores whether the performance of Paganini's Caprices for Solo Violin on the viola can perform a similar disruptive function to that of drag performances, creating a 'queer' classical music performance. Using autoethnographic methods of reflection on my performance experiences, I apply Halberstam's theory of failure as a queer aesthetic and Ahmed's idea of queer discomfort to the performance of Paganini's Caprices on the viola. I argue that this performance is parallel to the way in which drag performance navigates gender, with the viola unable to "pass" as truly virtuosic in this context. I propose that the adjustments that violists must make to perform this music are a way of 'queering' the conventions of this music. I posit that this 'queerness' is always present as the viola negotiates with a musical that is not suited to it - a transcription.

- **Title: Looking/Sounding Androgynous: An Analysis of Tomboy Body/Voice Aesthetics in East-Asia Taking Denise Ho as Example**

Authors: Yin Hsuan Dai*, Graduate Institute of Musicology, National Taiwan University

Subject area: Music and culture

Abstract: In contemporary popular music cultures in East Asia, tomboy-style performers have been existed as a force to defy existing gender norms and hierarchies. Yet while there have been some researches of queer performances under Euro-American contexts, few have focused on such cultures in East Asia. Taking the Hong Kong singer Denise Ho as an example, I would like to use the textual analysis of her music videos (in both visual and audio perspectives), and also the studies of audiences' commentaries based on her performance to answer the questions below: How does Ho demonstrates the tomboy/butch body/voice aesthetics on stage? How is such aesthetics distinguished from those in Euro-American contexts? How do these performances trigger the queer gaze/listening from her audience, and how does such gaze/listening help construct Ho's status as one of the most important lesbian icons in East Asia?

- **Title: Audio versus Midi similarity for Music Retrieval**

Authors: Fabio Gorodscy*, Universidade de São Paulo (USP); Shayenne da Luz Moura, USP; Marcelo Gomes de Queiroz, USP

Subject area: Music information retrieval

Abstract: Finding similar aspects of sound recordings is a great concern over automated music analysis applications. In this paper, we are seeking to measure how good can state-of-the-art extraction algorithms be used on creating abstractions of single-voiced audio recordings for querying similarities. Having a mindset of developing a query-by-humming application, we created experiments where we compared features automatically extracted from wav recordings, along with its ground-truth directly calculated from MIDI files. For the extraction, we used freely available open source software. Lastly, we discuss results showing that pitch interval representations ignoring time information can keep some discrimination capability.

- **Title: Evaluating Melodic Encodings for Use in Cover Song Detection**

Authors: David Wickland*, University of Guelph; David Calvert, University of Guelph; James Harley, University of Guelph

Subject area: Music information retrieval

Abstract: Cover song identification in Music Information Retrieval (MIR), and the larger task of evaluating melodic or other structural similarities in symbolic musical data, is a subject of much consideration and research today. Content-based approaches to querying melodies have been developed to attempt to identify similar song renditions based on melodic information. But there is no consensus on the type of encoding, or how to represent the symbolic melodic information to achieve greater classification accuracy. This paper evaluates the classification performance of five melodic encodings in cover song identification using exact and inexact matching algorithms for global and local sequence alignments. Results suggest the more lossy encodings can achieve better overall classification if longer melodic segments are available in the data.

- **Title: Assessing the acoustic properties of a woodwind instrument that cannot be played**

Authors: (David) Keith Bowen*, Royal College of Music

Subject area: Musical acoustics

Abstract: Most woodwind instruments in museums may not be played, because of the risk of damage. There is thus a large body of potential information in the world's collections of woodwind instruments that is inaccessible. The overwhelming contribution to the acoustic properties of a woodwind is made by the shape of its air column. From careful measurements and acoustic theory we may compute the acoustic impedance of the

instrument for all fingerings, and thus retrieve significant information. I will demonstrate the methodology by applying it to a bass clarinet, and comparing results with experimental measurement of acoustic impedances. Very good agreement was achieved, and excellent consistency with playing tests. For example, the calculations correctly predicted the excellent tuning and timbre of some fork fingerings but predict that others are unusable. We may therefore answer critical questions about woodwind instrument development by careful measurement and acoustic modelling.

- **Title: Interdisciplinary perspectives on playing an instrument: Does the shape of a recorder mouthpiece influence the timbre?**

Authors: Naomi Nordblom*, Ruprecht-Karls-Universität Heidelberg

Subject area: Musical acoustics

Abstract: This paper looks at the connection between the player and his or her instrument using the example of the recorder. Does the shape of the mouthpiece change the sound of the instrument, and if so, which frequencies are changed? In this survey, three people were recorded playing the same instrument with two different shapes of mouthpieces, the traditional shape and the other with a plastic 'hat' to change the shape of the mouthpiece. (The 'hat' had been developed by the author with the support of a professor of ortodontics.) The frequency spectrum of the recorded notes both with and without a hat was then analyzed. The spectra showed some differences. Their frequency area depends on the presence of a 'hat' and on the register of the played note. The results open new perspectives for interdisciplinary research (musicology, medicine and acoustics) to understand better the process of playing an instrument.

PAPER SESSION IV – 6/7/2018 13:30

- **Title: A sonification approach to Music visualization**

Authors: Roberto Bodo*, Universidade de São Paulo (USP); Flávio Schiavoni, Universidade Federal de São João del Rei (UFSJ)

Subject area: Music technology

Abstract: Music visualization always helped musicologists to analyze musical pieces. Traditionally, there are a few music visual formats that are standards and broadly used. Since computers started helping music analysis, several formats arose to represent music in a digital format. In this paper we propose three forms of music representation that can create visual feedback that is different from common music visualization. Our approach can bring some discussion about how different visual feedback can help musicians to understand a musical piece. This music representation is not concerned to be a better format but it is focused in aesthetics results that can provide alternative visualizations to musicians.

- **Title: Musical App in Hypersensitivity to Sounds in Neurodevelopmental Disorders: Applicable Strategies**

Authors: Débora Line Gomes*, Universidade Federal de Minas Gerais (UFMG);
Cybelle Loureiro, UFMG; Raquel Prates, UFMG

Subject area: Music technology

Abstract: Sêntimus is a musical app dedicated to children aged 6 to 7 years diagnosed with Hypersensitivity to Sounds associated with Neurodevelopmental Disorders. The application is part of an in progress Master's Degree project, conducted at the Department of Music in partnership with the Department of Computer Science of the Federal University of Minas Gerais, Belo Horizonte, Brazil. The objective of this app is to stimulate modifications in expressive behaviors of pleasure or dislike, characteristic of Hypersensitivity to Sounds, through game play and music. For the development, it was necessary to review the theoretical foundations of audio-visual interaction based on the literature on Hypersensitivity to Sounds and Neurodevelopmental Disorders. This work presents the results of a literature review, which focus on describing 12 strategies that were applied in the development of this game.

- **Title: Augmented Charango: an interface for enriching the Andean music social role**

Authors: Julian Jaramillo Arango*, Universidade de São Paulo (USP); Jaime Rojas
Vargas, Independent Researcher

Subject area: Music technology

Abstract: Departing from Thomas Turino's research about the context of the charango (Andean stringed instrument) in rural Peru which is highly symbolic and relates to processes of courting and love and using it as an inspiration, our aim is to create a new interface design for the charango that expands its social possibilities yet to be determined. An electronic extension of the instrument will be incorporated which enables the player to get new layers of sounds serving as a new development of the NIME (New Instruments for Musical Expression), human computer interaction and computer music. Schachter's work on live electronics and the Cajon (a Peruvian percussion instrument) and Escobar's expanded marimba from the Colombian Pacific coast as well as are all proper references for this research.

- **Title: Stockhausen's Struktur und Erlebniszeit: conceptual implications in late-twentieth century music analysis**

Authors: Ricardo Silva*, Universidade Estadual Paulista "Júlio de Mesquita Filho" - Unesp

Subject area: Music theory and analysis

Abstract: This research discusses the idea of music as a "shaper" of time from the analysis of the organization of sound material and its structure in the first section of Alexandre Lunsqui's Slope Field (2014). Definitions by Stockhausen in his article Struktur und Erlebniszeit (1955) offers the theoretical basis in order to evaluate its consequences and relevance in contemporary repertoire analysis. This article defines some processes of alterations, repetitions and perception of time flow through a brief analysis of the arrangement of musical events, evidencing Stockhausen's ideas concerning experiential time. Along with these concepts, the research applies definitions from Schaeffer (1966), Fraisse (1967) and Mesquita (1995, 2016). Finally, the research demonstrates that implications of Stockhausen's concepts about perception of musical structures offers an open field to considerations of temporal experience in contemporary music and provides a useful tool for music theory and composition.

- **Title: Combining Automatic Segmentation and Symbolic Analysis based on Timbre Features - A Case Study from Ligeti's Atmosphères**

Authors: Ivan Simurra*, Universidade de São Paulo (USP); Rodrigo Borges, USP

Subject area: Music theory and analysis

Abstract: It is an unsupervised method for detecting timbre structures of a György Ligeti's Atmosphères. This is an empirical approach that should be understood as a complement for score analysis methods and not as an alternative to it. This method is applied on the timbre features extracted from the phonogram and should provide analysts with some concrete reference. We used some computer techniques such as MFCC, PCA and Mean Shift clustering. From the symbolic music analysis, the structural planning was based on timbre transformation by a myriad of blocks of music structures built on some electroacoustic techniques. Previous results point to five as the most adequate number of clusters for statistically representing the extracted features and match reasonably to segmentation made manually. The computer-assisted approach was used as basis for discussing the metaphor that inspired this particular piece but has the potential to be extended to other compositions in the repertoire.

• **Title: Between sound and movement in embodied tango performance.**

Implications for the study of the performative style in tango.

Authors: Demian Alimenti Bel*, CIC (Comisión de Investigaciones Científicas de la Provincia de Buenos Aires) - LEEM (Laboratorio para el estudio de la experiencia musical)

Subject area: Music psychology

Abstract: In a recent work we studied differences that characterize styles of A. Troilo's and O. Pugliese's tango orchestras by analyzed the relationships between phenomenal accents and grouping units of the sonic melodic-rhythmic patterns. In the present work, we continue the stylistic analysis focusing on the expressiveness of the tango performer's body movements. The aim is to observe and describe expressive gestures in the movements of two bandoneón performers, interpreting a same tango according to Troilo and Pugliese styles. We analyzed the quality of body movements and effector gestures (Laban, 1971; Leman and Godoy, 2010) in the performance of rhythmic-melodic patterns. As to Troilo, the accentual and gestural conjunction is generally coincident with the metric scheme, and also with the grouping units. As to Pugliese, the melodic-rhythmic patterns are not performed in phase with the metric structure: the temporal distribution occurs at different levels of the metric hierarchy.

PAPER SESSION VI – 6/8/2018 09:00

• **Title: Evaluation of music cognition in children and adolescents with attention-deficit/hyperactivity disorder**

Authors: Marilia Nunes-Silva*, Universidade do Estado de Minas Gerais (UEMG); Sara Oliveira Alves, UEMG; Gabriel Telles de Mello e Silva, Universidade Federal de Minas Gerais (UFMG); Aline Aparecida Rocha Caetano, UEMG

Subject area: Music cognition

Abstract: Attention Deficit Hyperactivity Disorder (ADHD) is characterized by attention deficits, hyperactivity and impulsiveness. Considering the relationship between musical performance and the development of cognitive functions that may be compromised in ADHD, the present study aimed to evaluate the musical neuropsychological profile of individuals with ADHD. Twenty individuals aged 7 to 13 years, divided into two groups of 10 participants (clinical and control groups), participated in the study. Participants were assessed from tasks of intelligence, language and music perception. Results showed that individuals with ADHD had a significantly lower performance in the Melodic and Meter tasks. There were no significant differences in the performance on Rhythm and Musical Memory tasks. These results suggest that the difficulties found in Meter and melodic

discrimination could emerge as secondary characteristics to the primary deficits in ADHD, or to present as a comorbidity of this disorder.

- **Title: Effects of altered auditory feedback on the temporal control of discrete and continuous movements**

Authors: Thenille Braun Janzen*, University of Toronto; Bill Thompson, Macquarie University; Ronald Ranvaud, Universidade de São Paulo (USP)

Subject area: Music cognition

Abstract: Research indicates that distinct mechanisms regulate the timing of discrete and continuous rhythmic movements. These mechanisms (called event and emergent timing, respectively) may respond differently to auditory feedback. We investigated whether unexpected pitches in auditory feedback would affect timing accuracy of discrete and continuous rhythmic movements. Participants completed two tasks: finger tapping (Experiment 1) and circle drawing (Experiment 2). A synchronization-continuation paradigm was adopted whereby each action in the continuation phase triggered a sequence of repeated piano tones; however, in some trials, the auditory feedback of one tone of the sequence was altered. Results indicated that unexpected changes in feedback content induced different error correction responses in discrete and continuous rhythmic movements, and shed light on adaptation and anticipation mechanisms in the temporal control of different types of rhythmic movements.

- **Title: The Effect of Hand Shape Familiarity on Guitarists' Perceptions of Sonic Congruence**

Authors: Keith Phillips*, Royal Northern College of Music; Andrew Goldman, Columbia University; Tyreek Jackson, Columbia University

Subject area: Music cognition

Abstract: Musical performance depends on the anticipation of the perceptual consequences of motor behaviour. Altered auditory feedback has previously been used to investigate auditory-motor coupling but studies to date have predominantly used MIDI piano in experimental tasks. In the present study, 21 guitarists played chords on a MIDI guitar in response to tablature diagrams. In half of the trials at random, one of the notes in the heard chord was altered and participants judged whether the feedback was altered or not, responding as quickly and accurately as possible by pressing one of two buttons on a footswitch. In a separate study, the same participants ranked the familiarity of the chord shapes. We found that participants' judgement of sonic congruence tended to be faster when the chord shape was familiar and when feedback was congruent. A follow-up study is underway to further isolate the effect of hand shape familiarity on reaction times.

- **Title: Reliability inter examiners of the Brazilian version of the Nordoff Robbins Scale Musical Communicativeness**

Authors: Aline André*, Universidade Federal de Minas Gerais (UFMG); Cristiano Mauro Assis Gomes, UFMG; Cybelle Maria Veiga Loureiro, UFMG

Subject area: Music therapy

Abstract: The Musical Communicativeness Scale is used to evaluate behaviors from sound and musical stimuli since the decade of 1960 in the USA. To be used also in Brazil, a validation process is required. We chose for this validation process the model by Herdman, Fox-Rushby and Badia (1998). This model provides 6 types of equivalencies: conceptual, item, semantic, operational, measurement and functional. In this study we adopted the measurement equivalence by testing reliability inter examiners of the Musical Communicativeness Scale. We adopted the methodology analysis of 24 music therapy videos of assisted peoples with neurodevelopmental disorders through Musical Communicativeness Scale. Participated in this stage of this study 4 invited examiners and 1 researcher examiner. The interexaminer scores presented moderate and strong correlations (Spearman), indicating evidences of reliability for the translated Musical Communicativeness Scale and adapted to the Brazilian context

- **Title: It's not just music! : Impact of the environment and individual factors on music medicine**

Authors: Claire Howlin*, University College Dublin; Darragh Lynch, National College Ireland; Brendan Rooney, University College Dublin

Subject area: Music therapy

Abstract: Although music listening interventions (MLIs) have been shown to ameliorate the experience of pain via meta-analyses, there are no defined mechanisms underpinning the positive effects of MLIs. The primary aim of this scoping review is to narrow down potential cognitive mechanisms underpinning MLIs by describing and comparing the characteristics of MLIs when used in different analgesic settings. Using thematic synthesis this review describes musical aspects of MLIs such as sound quality, musical features, and music with cultural relevance, as well as less recognized non-musical features of music interventions such as volume control, environmental comfort, musicality, and directions from the researcher. In order to understand how people cognitively engage with music interventions, it is important to account for individual life experiences, cultural background and musicality. Future research should examine these factors more closely through experimental manipulation.

Poster Sessions

POSTER SESSION I – 6/6/2018 15:00

- **Title: Identity of Maranhão. A Biographical and Ethnographical Study of the “Choro Maranhense”**

Authors: Peter Ninaus*, Universität für Musik Graz; Raimundo João Matos Costa Neto, Universidade Estadual do Maranhão (UEMA)

Subject area: Music and culture

Abstract: The cultural complexity of Maranhão roots from its historical, commercial and geographical being. Analyses of biographies within the musical practice in São Luís show a different identity within the borders of Brazil. Political centralism and the picture to the exterior give a wrong idea of local cultural diversity. Next to the Amazonian region there can be found a poly-cultural landmark of different influences. In the center of this cultural diversity exists the tradition of “Choro Maranhense” which emphasizes connections from the past to the present. The biographical perspective tells about the work of local composers and the independent development of Choro in Maranhão. And the other analyses the characteristics, the ideas and the musical practice. Besides the globalization of music there is still a need of cultural independence and so local tradition counts against internet-broadcasting. “Choro Maranhense” is a good example for the power of this kind of local tradition.

- **Title: Aspects of Interaction in Mixed Electroacoustic Music**

Authors: Davi Tuchenhagen*, Universidade Federal do Paraná (UFPR)

Subject area: Music technology

Abstract: This paper analyses interaction in mixed electroacoustic music through the perception of streams in the listening experience. The interaction between acoustical instruments and electroacoustic resources is observed in a wider theoretical scope: the interaction between streams perceived in listening. The study investigates issues related to the characterization of streams, how we perceive their interaction, and how we can describe this interaction for analytical or compositional ends. For this, two central concepts are revised: Dennis Smalley’s “behavior” metaphor and Trevor Wishart’s “counterpoint” idea. We present a brief analysis of selected electroacoustic mixed works by Karlheinz Stockhausen, Cort Lippe, and Tristan Murail to better illustrate listening aspects of interaction in this repertoire.

- **Title: Moving Towards Synthesis: The Incorporation Of Technology In Music Through A Case Study Of The Flute (Virtual)**

Authors: Gerardo Lopez*, University of Redlands

Subject area: Music technology

Abstract: The following paper explores the integration of technology in music, specifically through the scope of flute composition and performance. By surveying pieces from the flute repertoire, the existence of three emergent stylistic categories that have distinct techniques and aesthetics will become apparent. The idea of a fourth category will also be discussed, but this particular category remains speculative as it has not emerged empirically, except for a few precursory examples. The importance of understanding this classification and categorization rests with being able to examine the evolving nature of the human-technology relationship within an artistic space, specifically, live performance.

- **Title: On Trevor Wishart's Musical Trade-Offs: Compositional Goals, Material's Selection and Suitable Sound Processes Supporting the Listener Perception.**

Authors: Felliipe Martins*, Universidade Federal de Minas Gerais (UFMG)

Subject area: Music theory and analysis

Abstract: Based on Wishart's literature, this paper investigates the most frequent and significant recorded voice transformation processes, and its correlation with the composer's compositional goals, presented on four Trevor Wishart's acousmatic pieces: Vox-5, Tongues of Fire, Globalalia and Encounters in the Republic of Heaven. Although Wishart developed new sound transformations using the phase-vocoder, the selection of the material takes a key role in determining which sound metamorphosis would fit his aesthetic goal: retain the source credibility from the listener perspective. This articles shows how his compositional goals in each piece demands both specific recorded materials and precise transformation processes in order to achieve his intention with respect to the listener. Hence, one of the main relevant aspects of Wishart's work for electroacoustic composers is to reveal - from the audience point of hearing - subtleties between natural and artificial transformations of voice samples.

- **Title: Mutationen III from Claudio Santoro: a case study of analysis and reinterpretation of mixed works**

Authors: Fabio Sousa*, Universidade Federal de Minas Gerais (UFMG); Margarida Borghoff, UFMG

Subject area: Music technology

Abstract: Attempting to break the coldness of siting in a room listening to fixed music, composers of electroacoustic music have been trying to add some vividness to the concert by adding live electronics, images, lightning or a human performer. Mixed music is the terminology we use to define the practice of composing for acoustic instruments accompanied by a prerecorded electronic part. The present article describes a practical

exercise of reconstructing the prerecorded part of the piece "Mutationen III", written for prerecorded sounds and piano, by the Brazilian composer Claudio Santoro. With this experience and the research of new sonorities based on the documentation presented in the score, a new version of the work was developed using the most recent tools for audio manipulation. This exercise proved to be an excellent opportunity to develop both analytical and compositional skills, as well as the ability to use digital audio manipulation tools.

POSTER SESSION II - 7/6/2018 15:00

• **Title: Brazilian musicologies: resources, approaches and designations**

Authors: Felipe Novaes*, Universidade Federal de Minas Gerais (UFMG)

Subject area: *Music and culture*

Abstract: Musicology as science, since its adlerian modern foundation to contemporary epistemological fields, presents itself in moving conceptual and paradigmatic frameworks. Nevertheless, the development of musicology in Brazil, in one hand, cannot be located in a parallel relation with German-English programmatic speeches and, in another, it does not need to be placed in this north-south nexus with regards of comparisons. Therefore, as the first time that Brazil receives the SysMus conference, the issue of Brazilian musicologies presents itself as a good subject for discussion. Moreover, for understand these multiple profiles this paper presents the analysis of Musicologia[s] (2016), an edited collection with contributions of representative Brazilian scholars exposing a range of solutions and agendas towards Brazil 21st-century realities. Although outlined in a plural dimension, from its analysis it is possible to outline three major fields of concern: resources, approaches and designations.

• **Title: A Musical Analysis of Mutantes' Balada do Louco**

Authors: Juliana Oliveira*, Universidade de São Paulo (USP)

Subject area: *Music theory and analysis*

Abstract: The aim of this study is to propose a textural, formal, harmonic and voice-leading analysis of the song Balada do Louco, written by the group Mutantes. The formal analysis was made according to concepts presented by William Caplin of inter and intrathematic functions and adapted for rock by Walter Everett. Harmonic analysis was done according to the syntactic criteria, that is, it is the approach in which the chords design a certain function in line with its context within the form of the music (NOBILE, 2016, passim). Harmony studies and Schenkerian rock analysis initiated by Christopher Doll and Mark Spicer are also considered in this study. The voice-leading analysis was applied according to concepts from Heinrich Schenker and adapted to the analysis in rock.

- **Title: Comparative Analysis As A Tool To Identify Aspects Of Electroacoustic Music Composers Language**

Authors: Dilson Cassaro*, Universidade Federal do Paraná (UFPR)

Subject area: Music theory and analysis

Abstract: The present article provides a description of how the comparative analysis of Pierre Couprie can be an useful tool to help the music analysts in identifying some compositional thoughts of composers about his electroacoustic works. In the essay entitled Analyse comparée des Trois rêves d'oiseau de François Bayle Pierre Couprie analyses in terms of material, morphology, shapes and graphic representation, three pieces of François Bayle that constitute the work Trois rêves d'oiseau. Besides providing a listening score, which shows structural aspects of the work, Couprie creates charts and tables to show correlations between the three pieces by means of, for example: materials articulation table, different sound units classification table, different morphologies chart, etc. The present article intends to shed some light on how the comparative analysis can be useful to identify musical language aspects of the composers.

- **Title: Dmitri Shostakovich and György Ligeti Strings Music Textural Similarities (Virtual)**

Authors: Carlos Alberto Oliva*, Universidade Estadual Paulista (IA-UNESP)

Subject area: Music cognition

Abstract: The study compares two music excerpts which denote sounding similarities. The first is in Dmitri Shostakovich's Symphony n° 2 (1927) and the second is in György Ligeti's Atmosphères (1961). Analyses were made using various musical parameters in order to explain the close sonoric results. The analytical approach is based on the specific sounding texture present in both excerpts and suggests that music cognition through auditory process reveal subjective musical issues that are not written on the music score and can be part of a deeper process of analysis. The holistic sounding phenomena require an analytical concept capable of demonstrating how 'sonority' turns into a functional dimension and may assume a structural role in music analysis (Guigue, 2004). After all it is important to realize that there is a link between the past traditions and new technics in arts once the later has its roots in the former (Schoenberg, 1984).

POSTER SESSION III - 8/6/2018 15:00

- **Title: Awê and spectacularization: the differential line.**

Authors: Daniele Fischer*, Universidade Federal de Minas Gerais (UFMG)

Subject area: Music and culture

Abstract: The present article intends to establish a discussion within the scope of the concept of spectacularization to the detriment of Awê (a polysemic term that designates, among other meanings, the Pataxó musical practices - focus of this reflection).

- **Title: Appropriation and inappropriate tradition in the practices of sampling and rap music production at the city of Belo Horizonte**

Authors: Michel Teixeira*, State University of Minas Gerais (UEMG)

Subject area: Music and culture

Abstract: Appropriation is a recurrent element in the context of Hip Hop. It can be enacted in a number of ways, but the tradition of sound sampling is a very significant creative resource driving music in the Hip-Hop culture. The use of sampling started in the 1980's and helped to configure the traditional sonority of rap. It helped the consolidation of the Hip Hop culture and Rap as a world music genre, but also promoted the development of local styles of Rap. How the original action of borrowing music samples evolved in such a diversity of local cultures of Rap? How do local agents of the cultures of rap produce idiosyncrasies from the idea of sampling? In this study, we investigate musical practices and sampling carried out by beatmakers in Belo Horizonte, based on an ethnography among artists from the city of Belo Horizonte.

- **Title: Aesthetic judgments and musical awe: implications of linking appraisal models and the BRECVEMA framework (Virtual)**

Authors: Landon Peck*, University of Oxford

Subject area: Music psychology

Abstract: There are striking commonalities between the hypothesised criteria for aesthetic judgments in music (beauty, expression, novelty, emotion, skill, message, style, and the sublime) and the proposed hedonic appraisals (threat, beauty, exceptional ability, virtue and the supernatural causation) theorised for the experience awe (Keltner & Haidt, 2003). Beauty and skill/ability are listed in both sets, suggesting both models may be related. Furthermore, the sublime is listed as a type of musical aesthetic judgment, while psychological and philosophical literature relating to awe suggest that the sublime is intrinsically related to sates of awe. These similarities may suggest that both models are targeting similar psychological appraisals, and these may best be understood as part of one another. This investigation explores the relationship between the two models advocates for an expansion of the BRECVEMA (Juslin, 2013) framework to more accurately represent the aesthetic emotion of awe.

Sponsors



Programa de Pós-Graduação
Stricto Sensu Mestrado em Artes



sempre:

Society for Education, Music
and Psychology Research



Research groups and institutions

Federal University of Minas Gerais - UFMG:

CEGeME - Center for Studies on the Musical Gesture & Expression

State University of Minas Gerais - UEMG:

GPCMC - Research Group "Body, Music and culture"

SysMus18 Organising Committee

- **Arícia Ferigato (Director)**
- **Tairone Magalhães (Director)**
- **Davi Mota (Scientific Director)**
- **Aluizio Neto (IT Maestro)**
- **Débora Line (Designer)**
- **Leandro Souza**
- **Lívia Itaborahy**
- **Marina Magalhães**
- **Michel Brasil**
- **Rodrigo Borges**
- **Thais Santos**

Supervisors

- **Prof. Dr. Luiz Naveda (UEMG)**
- **Prof. Dr. Maurício Loureiro (UFMG)**

NOTES:

U F *m* G



SMPC
Society for Music
Perception and Cognition



UNIVERSIDADE
DO ESTADO DE MINAS GERAIS



Programa de Pós-Graduação
Stricto Sensu Mestrado em Artes

sempre:

Society for Education, Music
and Psychology Research

