

Conference Program



Timbre MONTREAL 2026

4th International
Conference
on Timbre

2-4 July 2026

Faculté de musique
Université de Montréal



Centre for Interdisciplinary Research
in Music Media and Technology



ACTOR

ANALYSIS,
CREATION +
TEACHING OF
ORCHESTRATIC



Regroupement interuniversitaire de
recherche et création • musiques et sociétés

CRSH  **SSHRC**

Conseil de recherches en sciences humaines du Canada
Social Sciences and Humanities Research Council of Canada

Local Organizing Committee

Caroline Traube, Université de Montreal
Dominic Thibault, Université de Montreal
Robert Hasegawa, McGill University

Programme Co-Chairs

Caroline Traube, Université de Montreal
Jimmie LeBlanc, Université de Montreal
Robert Hasegawa, McGill University

Research assistants at Université de Montreal

Zakary Colello
Christina Diotto
Ravi Shankar Domingues
Rosalie Dutil
Daria Giritch
Simon Grégorcic
AC Riznar

Research assistants at U. McGill

Jade Roth
Joshua Rosner

Scientific evaluation Committee

Andrea Gozzi	Ichiro Fujinaga	Matthew Zeller
Andres Gutierrez Martinez	Igor Maia Jason	Nathalie Hérold
Asteris Zacharakis	Winikoff	Nicole Biamonte
Caroline Traube	Jay Marchand Knight	Nina Eidsheim
Catherine Guastavino	Jimmie LeBlanc	Robert Hasegawa
Charalampos Saitis	Joshua Rosner	Sølvi Ystad
Claudia Fritz	Kai Siedenburg	Stephen McAdams
Dominic Thibault	Kit Soden	Vasileios
Emily Dolan	Lindsey Reymore	Chatziioannou
Fabrice Marandola	Malte Kob	Zachary Wallmark
Gilberto Bernardes	Marcelo Caetano	Zoey Cochran

Steering Committee

Asterios Zacharakis (Co-Chair Timbre 2020; Chair Timbre 2023)
Charalampos Saitis (Chair of the Steering Committee; Co-Chair Timbre 2017, 2020)
Kai Siedenburg (Co-Chair Timbre 2017, 2020)
Lindsey Reymore
Stephen McAdams (Chair Timbre 2018)
Zachary Wallmark (Paper Co-Chair Timbre 2023)

/ Day 1 – Thursday, 2 July 2026 \

8:00 - 9:00	<u>Foyer de la Salle Claude Champagne</u> Registration and breakfast	
9:00 - 9:10	Welcome talk	
	<u>Salle Claude-Champagne</u>	<u>Salle Serge-Garant (B-484)</u>
9:10 - 10:25	<u>Session 1: Contemporary music analysis and dance</u> – Chair: Stephen McAdams 9:10 -- Enacting Violence through Choreography-Orchestration Relationships in Stravinsky's Sacrificial Dance, Rebecca Moranis 9:35 -- Orchestration and Transformation Procedures in George Benjamin's Dance Figures, Igor Maia & Robert Hasegawa 10:00 -- Analysis of Orchestration Style: A Case Study of Two Works by Germaine Tailleferre, Jade Roth	<u>Session 2: Aestheticizing noise</u> – Chair: Caroline Traube 9:10 -- It May Not Be Noise: Composing Mental Timbre Through Redistribution and Contextual Interference, Rafael Maia & José Alberto Gomes 9:35 -- <i>Phantom Polyphony</i>: Modeling Tinnitus and the Variability of Its Timbre in the Context of an Art Installation, Thomas Augustin 10:00 -- Don't Let Screaming Ruin Your Beauty Sleep, Just Bleach It! A Study of Frequency Shearing for Noise, Marina Lee
10:25 - 10:45	Coffee break and poster session (foyer)	
10:45 - 12:00	<u>Session 3: Extended techniques</u> – Chair: Nathalie Hérold 10:45 -- Classifying String Instrument Preparation Techniques: Analysis, Taxonomies, and Applications in Computer-Aided Orchestration, Maurizio Azzan & Luca Guidarini [v] 10:50 -- Analyzing String Instrument Preparation Techniques in Context: Timbral Space, Syntax and Form, Ingrid Pustijanac & Michele Leggieri 11:15 -- Hearing The Unconventional: A Study of Perceptual Fusion of Extended Techniques in Contemporary Classical Music, Jia Yi Lee & Jenine Brown 11:35 -- Applying Timbre Analysis in the Performance of Chamber Music with Timpani and Cello, Manuel López Tovar	<u>Session 4: Crossmodality</u> – Chair: Lindsey Reymore 10:45 -- How Transmodal Performative Settings Shape Timbral Perception, Ajtony Csaba 11:10 -- Crossmodal Semantic Priming between Timbre and Olfaction: Does Timbre Activate Semantic Associations? Asterios Zacharakis 11:35 -- Microsensorium: Timbral Crossmodal Worlds in Orchestral Music and AI Video, Chelsea Komschlies
12:00 - 13:20	Lunch break and poster session	
	1. The Contours of Timbre in Rebecca Saunders's Fury II, Ash Mach 2. Colouring Shapes and Forms: Timbral and Orchestration Strategies in the Serial Works of Elisabeth Lutyens, Aidan McGartland 3. Hearing the Form, Seeing the Material: Global and Local Feature Correspondences Across Vision and Audition, Asterios Zacharakis & Amit Gur 4. MusicVis: Leveraging Cross-Modal Correspondences for Fine-Grained Visual Representations of Music, Kelly Raines & Xin Wei Sha 5. Toward a Conceptual Framework for AI-Driven Timbre Transformation: Exploring Ethics, Occlusion, Transparency, and Interaction in Algorithmic Design, Steven Lewis	

/ Day 1 – Thursday, 2 July 2026 \

	6. Concrete Listening in Latent Space: Reduced Semantic Conditioning of Diffusion Transformers as a Compositional Strategy, David Piazza 7. Prony-Informed Percussion Orchestration: A Case Study in Elements of Adventure, Joseph Chang & Philippe Depalle 8. Timbre Discrimination in Drum Tom-Toms: An Approach Based on Audio Descriptors and Timbre Space, Carlos de Castro & Marcelo Gomes de Queiroz	
	<u>Salle Claude-Champagne</u>	<u>Salle Serge-Garant (B-484)</u>
13:20 - 14:50	<u>Session 5: Panel -- Negotiating Timbre between East and West: Friction, Reflexivity, and Knowledge-Making in Cross-Cultural Timbral Studies</u> – Moderator : Yifan Huang 13:20 -- Introduction 13:25 -- A Cross-Cultural Comparison of the Timbre-Semantic Space of Chinese Instrumental Sounds, Yifan Huang, Lena Heng, Zijin Li & Stephen McAdams 13:40 -- Notating Timbre in Jianzipu: A Gesture-Based MEI Encoding Module, Eto Sun, Yifan Huang & Ichiro Fujinaga 13:55 -- Western and Chinese Musical Acoustics in Dialogue: Understanding the Timbre of the Chinese Transverse Flute (dizi) Through Physics, Xinmeng Luan & Gary Scavone 14:10 -- Hearing Orchestration with the TOGE: A Perception-Oriented Case Study of Lei Liang's Tremors of a Memory Chord, Linglan Zhu, Yifan Huang, Florian lochem, Chen Fan, Lena Heng, & Stephen McAdams 14:25 – Panel discussion	<u>Session 6: Panel -- Timbre and the Politics of Artificial Creativity</u> – Moderator : Charalampos Saitis 13:20 – Introduction 13:25 -- Cat In Loop: A Case Study On Timbre, Imagination And AI, Weilu Ge & Nithya Shikarpur 13:50 -- Timbre at the Interface: Negotiating Audio Representations in the Age of Artificial Creativity. Panel participants: • Weilu Ge • Steven Lewis • Landon Morrison • Hee Seng Kye • Nithya Shikarpur • Kai Siedenburg • Dominic Thibault
14:50 - 15:10	Coffee break	
15:10 - 16:30	<u>Session 7: Timbre and sound spatialization</u> – Chair : Catherine Guastavino 15:10 -- Composing Timbre in Space: Spatialisation as a Timbral Parameter in Higher-Order Ambisonics, James Bagshaw 15:35 -- Resonance and Depth: Composing Timbral Identity and Spatial Form in an Artist-in-the-Loop Co-Creative Multi-Agent Percussive Performance, Keon Ju Maverick Lee 16:00 -- Timbre Spatialisation: The Medium is Space, Robert Normandeau	<u>Session 8: Percussion and rhythms</u> – Chair: Kai Siedenburg 15:10 -- Timbre and Rhythmic Parsing: Spectral Centroid and Temporal Envelope Effects on Prominence and Grouping, Joshua Rosner, Stephen McAdams, & Michael Wagner 15:35 -- A Multidimensional Scaling Timbre Space for Percussive Musical Instruments Generated by Physical Modeling Synthesis, Marcelo Caetano & Josh Mitchell [v] 15:40 -- Mapping the Concert Snare Drum: A Sound Catalogue Through Improvisation, Tarcísio Braga 16:05 -- Percussion Patterns, Rhyming Poetry, and the Expectation of Recurring Timbres: Case Studies from Sri Lanka, Eshantha Peiris
16:30 - 17:00	Break	

/ Day 1 – Thursday, 2 July 2026 \

17:00 - 18:00	<u>Salle Claude-Champagne</u> Keynote lecture and CIRMMT distinguished lecture: <u>Sølvi Ystad</u> Timbre, evocations and perceptual engineering: past and present contradictions and illusions
18:00 - 19:30	Welcome reception

Notes:

[illegible]

// Day 2 – Friday, 3 July 2026 \\\

	<u>Salle Claude-Champagne</u>	<u>Salle Serge-Garant (B-484)</u>
9:00 - 10:15	<u>Session 9: Aesthetics and Political Philosophy</u> – Chair: Joshua Rosner 9:00 -- The Violent Particularity of Timbre as Sonic and Symbolist Ideal in New Music, Amy Bauer 9:25 -- "Almost Unbelievably Rich": Autistic Listening and Wandelweiser Music, Nathan Friedman 9:50 -- Timbre's Beholders and the Racialization of Sensation in Concert Music Aesthetics, Colin Tucker	<u>Session 10: Timbre in instrumental performance</u> – Chair: Julie Delisle 9:00 -- Physical Analysis of Sound Production in the Baroque Traverso: Geometry, Resonance, and Timbre Control, Patricio de la Cuadra, Benoît Fabre & Augustin Emoult 9:25 -- Individual Differences in Bow-Related Timbre Across 23 Recordings of Bach's Fourth Cello Suite Prelude, Clare Monfredo 9:50 -- Timbre & Text: A Preliminary Study of Dietrich Fischer-Dieskau's Recordings of Schubert's "Gute Nacht", Tracy Lipke-Perry
10:15 - 10:35	Coffee break	
10:35 - 12:00	<u>Session 11 : Sound Studies and Phenomenology</u> – Chair: Robert Hasegawa 10:35 -- Listening to Demonstrations: Timbral Perspectives on Urban Crowd Sound, Kamyar Karimi, Alice Jarry & Gabriel Vigliensoni [LT] 10:45 -- Timbre as Exposure: Fragility, Proximity, and the Audibility of the Body, Hee Seng Kye 11:10 -- Toward a Lachenmannian Phenomenology in the Music of Lachenmann, Saunders, and Iannotta, Zachary Bernstein 11:35 -- Timbre as a Combination of Its Source and Contents: A Phenomenological Metaphor-Based Framework for Analysing Timbre in Musical Works, Matt Collins	<u>Session 12: Hearing/Touching Synthetic Textures</u> – Chair: Asterios Zacharakis 10:35 -- Timbre beyond hearing: auditory and vibrotactile interactions in the perception of timbre-related acoustic features, Loonan Chauvette, Anne Sophie Grenier, Philippe Albouy, Emily Coffey, Robert Zatorre & Andréanne Sharp 11:00 -- Empirical Study of the Semantics of Synthetic "Timbre-Textures", Jason Noble, Francis Bourgoin, Takuto Fukuda, Caroline Traube, & Zachary Wallmark 11:25 -- Gestural Control of Timbre with a Digital Musical Instrument, Gaël Moriceau
12:00 - 13:20	Lunch break and poster session	
	1. Towards Embodied and Inclusive Crossmodal Experiences of Timbre and Music: User Perspectives of a New Vibrotactile Assistive Device, Alex Bégin, Loonan Chauvette, Jérémie Voix, Matthieu J. Guitton, & Andréanne Sharp 2. Play and Recognition in Mixed Instrumental Works, Nicholas Ma 3. Measuring Consistency in Explainable Synthetic Timbre Annotators, Peter McCabe, Alec Krsek, & Patrick Donnelly 4. Learning Vocal Timbre Similarity for Personalized Singer Matching and Song Recommendation, Jiaxing Yu, Yingping Cao, Ziyi Huang, Yuhang Jin, Shuyu Li1, & Kejun Zhang 5. Investigating "Timbre Tagging" of Pitch Structure in a Statistical Learning Paradigm, Adam Andrew Garrow & Marcus Thomas Pearce 6. Everyday Sounds as Emotional Catalysts: A Research-Creation Study in Contemporary Music, Jonas Regnier, Yifan Huang & Stephen McAdams 7. Grounding Musical Intimacy in Timbre: Exploring a Conceptual Model of Intimate Listening, Yifan Huang, Martha de Francisco, & Stephen McAdams 8. Creating a Timbral Monster: The Superclarinet of Martino's Triple Concerto, Zachary Brennan 9. Timbre as a Pedagogical Tool for Students with Dyslexia in the Music Theory Classroom, Joy Anderson	

// Day 2 – Friday, 3 July 2026 \\\

	<u>Salle Claude-Champagne</u>	
13:20 - 14:20	Keynote lecture: <u>Zachary Wallmark</u> Authentic, idiosyncratic, or enchanted? Three ideologies of timbre in popular music	
14:20 - 14:40	Coffee break	
	<u>Salle Claude-Champagne</u>	<u>Salle Serge-Garant (B-484)</u>
14:40 - 16:30	<u>Session 13: Synthetic Timbre in Popular Music</u> – Chair: Ben Duinker 14:40 -- The Transmedial Ecology of Robot Timbres: Sonic Metaphors and the Evolution of Dubstep Music, Mark Higgins 15:05 -- Deviant Timbre: Sounding Beyond the Human in Pharmakon's Maggot Mass (2024), Bailey Hilgren <i>10 min. break</i> 15:40 -- The Timbre Is the Instrument: The Imagined DX7 and 1980s Nostalgia, Megan Lavengood 16:05 -- Synthetic Timbres, Cinematic Worlds: Queen's Flash Gordon Soundtrack as a Paradigm for Sound Synthesis and Processing, Nicola Bizzo	<u>Session 14: Communicating about Timbre</u> – Chair: Joshua Rosner 14:40 -- A Multi-Space Hierarchical Timbre Model: Perceptually Grounded Prediction of Timbral Similarity, Siavosh Banihashemi 15:05 -- From Terms to Concepts: Towards an Epistemology of North-American Timbre Theory and Analysis of the Mid-1970s, Nathalie Hérold <i>10 min. break</i> 15:40 -- The Classroom Case for Timbre, Holly Bergeron-Dumaine 16:05 -- Toward a Cross-Disciplinary Framework for Strategic Communication About Timbre, Lindsey Reymore
16:30 - 16:45	Break	
16:45 - 18:00	<u>Session 15: Emotions and intimacy</u> – Chair: Gina Fatone 16:45 -- Emotions in Song and Speech: Acoustic Features Underlying the Multidimensional Space of Perceived Emotions, Lena Heng & Annabel Cohen 17:10 -- Timbre as a Compositional and Relational Tool in an Immersive Contemporary Music Performance for Infants (0–2 years), Anne Chabot-Bucchi & Joshua Bucchi 17:35 -- The Intimate Timbres of the Kantele: Materiality, Touch and Cultural Memory, Arja Kastinen	<u>Session 16: Appropriating sounds of nature</u> – Chair: Rebecca Moranis 16:45 -- Lithophonica: Timbral Explorations of Stones and Sticks, James Harley & Gayle Young 17:10 -- Timbre Across Species: Appropriating Bird Vocalizations in Contemporary Music, Matthieu Galliker, Jimmie LeBlanc, Caroline Traube 17:35 -- Ethereality in Jennifer Higdon's Early Works, Laura Dallman

Notes:

[illegible]

/// Day 3: Saturday, 4 July 2026 ///

	<u>Salle Jean-Papineau-Couture (B-421)</u>	<u>Salle Serge-Garant (B-484)</u>
9:00 - 10:15	<u>Session 17: Ethnomusicological perspectives</u> – Chair: Stephen McAdams 9:00 -- The Commitments of Physical Modeling: Timbre, Mediation, and Virtual Instrument Construction, Xyh Tamura [v] 9:05 -- On the Global Study of Timbre, Jason Winikoff [v] 9:10 -- Timbral Transformations in Tunisian Folk Music: A Case Study of the Small-sized 'Darbuka' Drum, Ali Chamseddine [v] 9:25 -- Analyse et perception du timbre et des pratiques de orchestration en Méditerranée, Mondher Ayari 9:50 -- Timbral Signatures in Cuban Dance Bands from Songo to Timba: Hybridities, Technologies, and Vocality (1970–1995), Joshua Bucchi	<u>Session 18: Artistic reports: Bridging acoustics and electronics</u> – Chair: Ingrid Pustijanac 9:00 -- Satellites: Orbiting Composer and Performer Insights on Timbre in a Work for Piano and Electronics, Hubert Ho & Matthew Schumaker 9:25 -- Unplugged Electronics and Expansive Orchestration for a New Guitar Concerto, Marc Garcia-Vitoria 9:50 -- Bell Timbres as Compositional Framework: Acoustic, Algorithmic, and Formalized Approaches, Dongryul Lee
10:15 - 10:35	Coffee break	
10:35 - 12:00	<u>Session 19: Perception, imagery and memory</u> – Chair: Lena Heng 10:35 -- Can Instrumentation Predict Pitch-Class Profiles?, Noah Kahrs [LT] 10:45 -- Timbral imagery for instrumental dyads, Linglan Zhu 11:10 -- Differential Short-Term Memory for Spectral and Temporal Dimensions of Timbre, Stephen McAdams, Behrad Madahi & Bryana-Alexa Liberta 11:35 -- Instrument Identification in a Virtual Orchestral Scene, Kai Siedenburg	<u>Session 20: Timbre and interaction in contemporary music</u> – Chair: Dominic Thibault 10:35 -- Cross-Cultural and Cross-Medium Timbre in Contemporary Music, Bike Oner [v] 10:40 -- Composer-performers interaction in pieces featuring specific instruments: a case study of Essai de coexistence sonore for electroacoustic guitar, Karlox, and double bass, Benjamin Lavastre, Mael Oudin & Andrea Gozzi 11:10 -- Orchestrating Timbre with Interaction Scenarios, Frédéric Roverselli 11:35 -- Time-dependent Materials and Gesture in Timbral Shaping: Towards a Material-based Sonic Device, Maria Vittoria Agresti, Ernesto Di Maio, & Stefano Silvestri
12:00 - 13:15	Lunch break and poster session	
	1. Evaluation of Audio and Language Foundation Models on Timbre Cognition Tasks, Yorgos Velissaridis, György Fazekas, & Charalampos Saitis 2. Transitivity and Timbre Similarity Judgment, Molly Jones & Sile O'Modhrain 3. Memory for Musical Meaning Through Timbre Semantics, Susanne Sevcik 4. Timbre, Perception, and Musical Form in Tan Dun's Water Concerto (1998), Anqi Wang 5. Thinking Timbre Through Light: Chiaroscuro Metaphors in Saariaho's Solo Cello Music, Rafael Felicio Silva Godoi & Igor Leão Maia 6. From Numbers to Practice: The Perceptual Reality of Neutral Intervals in Persian Tuning, Farzad Milani 7. Is Everything Romantic?: Sonic Expressions of Gender in Hyperpop Vocal Production, Lilly Korkontzelos 8. Invariant Instrumentation and the Effects of Shifted Vocal Performance on Screamed Deathcore Songs, Zachary Simonds	

/// Day 3: Saturday, 4 July 2026 ///

	<u>Salle Jean-Papineau-Couture (B-421)</u>	<u>Salle Serge-Garant (B-484)</u>
13:15 - 14:30	<u>Session 21: Timbre, gesture and embodiment</u> – Chair: Eshantha Peiris 13:15 -- From Sensitive Listening to Sound to the Intuition of a Gesture, Jean Geoffroy 13:40 -- "So that the sting first enters the skin, and then hurts": Embodied Transmission of a Single Note, Gina Fatone 14:05 -- An Embodied and Crossmodal Approach to Timbre in Unaccompanied Solo Traditional Singing, Kristin Jonzon	<u>Session 22: Vocality</u> – Chair: Jason Noble 13:15 -- Emergence of Vocality: Hybridization and Timbral Metamorphoses Between the Pipe Organ and the Voice in the Ora and Vox Humana Projects, Hyun-Hwa Cho & Christophe d'Alessandro 13:40 -- Sounding "round", "bright", "Oooh" or "Aaah": on the Use of Phonemes to Describe the Timbre of String Quartet Instruments, Leïla Barbedette, Claudia Fritz & Caroline Traube 14:05 -- Two Rappers: Recreating Vocal Patterns through Percussion in George Lewis' North Star Boogaloo, Malcolm Taylor
14:30 - 14:50	Coffee break	
14:50 - 16:50	<u>Session 23: Timbre in popular music</u> – Chair: Zachary Wallmark 14:50 -- Orchestration of Polyrythms in Hiatus Kaiyote's Music, Kelsey Lussier [LT] 15:00 -- Analyzing Studio Orchestration in the Music of Michel Legrand, Mael Oudin 15:25 -- Exertion Narratives in Pop Music Production, Will Mason <i>10 min. break</i> 16:00 -- Beyond Voice Superiority: Acoustic Factors Driving Vocal Salience in Musical Mixtures, Michel Bürgel & Kai Siedenburger 16:25 -- Queering Timbre: The Colourful Sounds of The Cure, Jay Marchand Knight	<u>Session 24: Timbre in contemporary music</u> – Chair: Stephen McAdams 14:50 -- Timbre as Structure: Case Study of Georg Friedrich Haas's 11.000 Saiten, Isabel Keleti [LT] 15:00 -- Composing for the Liminal Spectral Organ, Louis-Michel Tougas 15:25 -- Timbre in the Music of Luciano Berio: A Workshop on the Sources, Christoph Neidhöfer <i>10 min. break</i> 16:00 -- "From Inner to Outershadow": Ensemble Coherence in Recent Works for Oboe and Strings, Anton Vishio 16:25 -- Double-Reed Multiphonics: Their Character, Stability, and Potential for Integration With Heterogeneous Instrumental Ensembles, Roger Reynolds & Paul Hembree
16:50 - 17:05	Break	
17:05 - 17:30	<u>Salle Claude-Champagne</u> Closing remarks	
17:30 - 19:00	<u>Concert</u> Mael Oudin — <i>Essai de coexistence sonore</i> (karlax & double bass) -- performed by Benjamin Lavastre & Mael Oudin Arja Kastinen — <i>On the shoulders of the Great Bear</i> (Kantele) Keon Ju Maverick Lee — <i>Resonance and Depth</i> (acousmatic) Gaël Moriceau — <i>Harmonic Turbulences</i> (T-Stick) <i>Intermission</i> Tarcísio Braga — <i>Tambor</i> (snare drum & electronics) Matt Schumaker — <i>Satellites</i> (piano, electronics & spatialization) — performed by Hubert Ho Robert Normandeau — <i>StrinGDberg</i> (acousmatic)	

[illegible]