**FRIDAY, October 4**

**Keynote 1 Paul Boghossian (NYU) (10:15-11:15): What is the Role of Meaning in Musical Experience**

I will be revisiting the classic questions: Does music have an extra-musical meaning? If so, what is it? How is it determined? And what role does it play in our appreciation of music?

**Talk 1 John Schindler (Pittsburgh) (11:30 - 12:00): The Metasemantics of Music**

Many believe that, in addition to expressing emotions, music represents extramusical ideas; however, there is scant philosophical literature discussing what it is for a piece of music to have a particular representational meaning—music’s metasemantics. To answer this question, I distinguish between a musical sound’s descriptive meaning—how it tends to be interpreted—and its normative meaning—how it ought, aesthetically speaking, to be interpreted. I reductively analyze both concepts in terms of hearing a sound as something else. I then argue against two alternative proposals; descriptive musical meaning can be analyzed neither in terms of resemblance nor in terms of musicians’ communicative intentions.

**Talk 2 Christian De Leon (Williams) (12:05 - 12:35): Emotive Expressions and Discourse Structure**

Emotive expressions (including facial expressions, emotive markers, emoji, linguistic expressives, and emotional prosody) are classically analyzed as contributing content that is aside from the "main point" of an utterance—contributing not-at-issue content. I argue that emotive expressions enable a special kind of speech act that is unpredicted by standard views. I present data that show how an emotive makes a speaker's expressed attitude available for explanation, regardless of medium (e.g., prosody vs. written "damn") or whether the attitude makes sense in context. I develop a dynamic discourse semantics on which emotives make public commitments available for certain anaphoric relations.

**Ed Large (UConn) (12:40 - 1:10): Musical Neurodynamics**

A great deal of research in the neuroscience of music suggests that neural oscillations synchronize with musical stimuli. One well-known consequence of synchronization is expectation; however, neural synchronization has far-reaching implications for music. I will describe how fundamental dynamical principles based on known neural mechanisms can explain basic aspects of music perception and performance, as summarized in neural resonance theory (NRT). Building on principles such as resonance, stability, attunement, and strong anticipation, I suggest that people anticipate events not through predictive neural models, but because brain-body dynamics physically embody musical structure. The interaction of certain kinds of sounds with ongoing pattern-forming dynamics results in patterns of perception, action, and coordination that we collectively experience as music. Statistically universal structures may have arisen in music because they correspond to stable states of complex, pattern-forming dynamical systems. This analysis of empirical findings from the perspective of neurodynamic principles sheds new light on the neuroscience of music and on what makes music powerful.

**Keynote 2 Philippe Schlenker (Ecole Normale Supérieure & NYU) (2:30 - 3:30): Featural Interpretation**

Recent work seeking to provide a formal account of meaning in animal communication took call form to be arbitrary (Schlenker et al. 2014, 2016b). But a long line of research (from Marler 1955 to Magrath et al. 2020) has shown that this is not always so, especially in birds: there is sometimes widespread convergence among the calls of different species, to the point that a species may understand the calls of another one that is geographically and phylogenetically extremely distant. This suggests that there might be a natural biological code by which the calls of unrelated and unfamiliar species can sometimes be understood without prior exposure. We clarify this possibility by distinguishing among three degrees of interspecies comprehension. In the first degree ('Understand Thy Neighbor'), a species understands some of the calls of a neighboring species because it is exposed to them. In the second degree ('Call Convergence'), a species may understand the calls of an unrelated and unfamiliar species by virtue of Marlerian convergence: a heterospecific call may globally resemble a conspecific call enough to yield understanding. In the third degree ('Featural Interpretation'), a species may use a rule that associates a meaning to a specific acoustic feature – e.g. higher call rate signals greater urgency, higher pitch signals greater arousal, greater noisiness signals greater negativity. This yields a kind of featural compositionality by which a species may understand a heterospecific call that does not globally resemble any familiar call, but still includes the crucial, interpretable feature. There might thus be an entirely new road to the emergence of compositionality in studies of meaning evolution. We lay out possible mechanisms of evolution of these degrees of interspecies comprehension, and isolate predictions that distinguish the third degree from the second.

**Talk 3 Kathryn Franich (Harvard) (3:45 - 4:15): Phonological Rhythm Constrains Speech and Musical Gestures: Evidence from Two Niger-Congo Languages**

In many musical traditions, rhythmic aspects of spoken language interact with musical form. Theorists studying the music of West and Central Africa have alluded to the importance of spoken language rhythm in shaping musical form; however, little linguistic work has sought to understand the rhythmic properties of languages spoken in sub-Saharan Africa. I draw on patterns from 2 multi-modal corpora of language and gesture for speakers of Medʉmba and Igbo to demonstrate that rhythmic structure is not only a critical component of linguistic grammar for these languages, but also serves as a locus for coordination of linguistic and musical gesture.

**Keynote 3 Reyna Gordon (Vanderbilt) (4:20 - 5:20): Genomic Discoveries Shed New Light on the Biological Underpinnings of Human Musicality and Language**

Studies of inter-individual differences in musical rhythm and language skills often show positive associations, even when the stimuli and tasks are quite different. Complementing neurocognitive explanations, in this talk I will focus on genomic approaches that are unraveling some of the shared variance between people's rhythm and language abilities. I will discuss the Musical Abilities, Pleiotropy, Language, and Environment (MAPLE) framework, and make a case that it will fill a key gap in our understanding of the etiology of individual differences in language acquisition and skill during the lifespan . We posit that musical and language-related abilities likely share some common genetic architecture (i.e., genetic pleiotropy) in addition to some degree of overlapping neural endophenotypes. I will present new genomic and epidemiological findings in support of MAPLE's predictions, revealing mechanistic underpinnings in the form of pleiotropy of rhythm and language traits and their downstream neurobiological processes influenced by that shared genetic variation.

**Demo 1 Sparrow LoCurt (Colorado) (5:20 - 5:40): Breaking Boundaries: Expressions of Masculinity in the World of B-boys**

This paper examines expressions of masculinity in b-boying/b-girling, or breaking – an element of hip-hop culture. Using a historical backdrop, personal and public interviews, and praxis, it illustrates the prevalence of masculinity within breaking. It asks: how is gender valued in the scene? How does one’s gender performance impact their acceptance by and sense of belonging within it? This discussion opens up other interdisciplinary avenues for understanding gender expression, including but not limited to the connection between this dance style and its music, and potential expressive limitations -- if dance is a language -- of a style founded in and exalting masculinity.

**SATURDAY, October 5**

**Keynote 4 Isabelle Charnavel (Université de Genève) (9:30 - 10:30): Linking Music and Dance Perception: A Linguistics-based approach focused on Rhythm**

The specific goal of the talk is to apply the formal methodology of linguistics to the exploration of the interaction between music and dance rhythm perception based on specific case studies from the Western tradition. The more general goal is to shed further light on the organizational principles governing the mental representations induced by dance and music perception, as well as their relationship, by distinguishing between general cognitive properties and modality-specific or domain-specific properties

**Talk 4 Gretchen Horlacher (UMD) (10:45 - 11:15): Waiting to Move: Balanchine’s Dialogue with Tchaikovsky’s *Serenade*.**

What does it mean to wait? When we wait, we pause, expecting a change. Balanchine’s choreography for Tchaikovsky’s *Serenade* opens by asking us to wait. The music begins, but the curtain does not rise, creating anticipation for this basic event. When it rises, we see a large female corps in diagonal formation with arms upraised, standing stock still.  Now we wait for the dancers to move, even as the music continues. Both tonal music and classical ballet create experiences of movement; this paper explores their complex interactions so as to teach us to wait.

**Talk 5 CiJun Gao, Ut Meng Lei, Victoria LEI Lai Cheng, Ruey-Song Huang (University of Macau) (11:20 - 11:50): Crossmodal Musical Information is Processed through Bilateral Language Streams: Evidence from Phase-encoded fMRI**

Previous studies revealed neural overlaps and distinctions in music and language processing but lacked understanding of brain dynamics. This study used rapid phase-encoded fMRI to map spatiotemporal traveling waves of blood-oxygen-level-dependent (BOLD) signals during crossmodal tasks featuring visual and auditory input. Participants memorized and reproduced digit sequences for language tasks and sang numbered musical notations for music tasks. Results revealed significant neural overlaps across brain regions, with bilateral activation streams during reading/listening, memorizing, and producing phases. Implications for the effectiveness of rapid fMRI in music and language processing studies and music-to-language transfer were discussed.

**Demo 2 Joseph Teeter (Roehampton) (11:55 - 12:15): Choreomusical Dialogue in Pam Tanowitz’s New Work for Goldberg Variations (2017)**

In 2017, contemporary dance choreographer Pam Tanowitz collaborated with pianist Simone Dinnerstein to create New Work for Goldberg Variations, set to Bach’s keyboard work The Goldberg Variations. In this paper I will examine the relationship between music and movement in New Work. Drawing on close analyses of Bach’s score, filmed performances, and the perspectives of the artists involved with the work, I will explore how Tanowitz’s choreography relates to and interacts with Bach’s score in a choreomusical dialogue, and how this dialogue potentially influences the spectator’s experience and interpretation of the work.

**Keynote 5 Alison Wray (Cardiff) (1:30 - 2:30) Blind spots in learning language and music: when your output doesn’t reflect what you know**

This presentation will explore similarities and differences between unanticipated errors made in second language production and in music practice. Why can we practise one thing till it is fluent and perfect, yet introduce errors later? What can each domain teach the other about the nature of these problems and potential ways to resolve them?

**Talk 6 Oliver Schütze (Justus-Liebig-Universität Giessen) (2:45 - 3:15): What Music Maps to. Teleosemantics and the Role of Re-enactment in Musical Practices**

Our paper aims to outline how teleosemantics, combined with a certain model for understanding musical utterances, lays the foundation for a compelling theory of musical meaning or representation. We will elucidate how meaning is constituted in practices, meeting the metasemantic conditions of teleosemantics, present our semantic thesis that musical expressions are fundamentally directive, encouraging participation, with the music's form imperatively mapping to acceptable forms of participation, and introduce a suitable model of musical understanding in terms of re-enactment.

**Talk 7 Peter Kaminsky (UConn) & Megan Lyons (Furman) (3:20 - 3:50): Joni Mitchell as anomalous autodidact: mental mapping in the creative process**

Joni Mitchell shares several attributes with other self-taught singer-songwriter-performers: she doesn’t read music, has no formal music-theory background, and stresses instinct and feeling in interviews. However, many of Mitchell’s songs resemble classical art song far more than folksong or pop in their text-music relations; and her guitar playing is an integral voice and not mere accompaniment. We propose that Mitchell’s use of “mental mapping” (Lilliestam 1996) serves as a creative catalyst for her songwriting, analogous to traditional music theory for composers of Western notated music. We expand Lilliestam’s concept beyond musical memory in investigating Mitchell’s complex musical and expressive identity.

**Keynote 6 Eduardo Mercado (University at Buffalo) (4:00 - 5:00): The Everchanging Wails of Whales**  
Singing humpback whales continuously modify elements of their songs throughout their adult lives in ways that suggest sophisticated social learning and/or a flexible capacity for coordinated vocal adjustments.

**SUNDAY, October 6**

**Talk 8 Justin London** (**Carleton**) **(9:30 - 10:00): Musical Expertise Affects the Rhythmic Perception of Sung and Spoken Speech Syllables.**

Many aspects of musical expression depend upon rhythmic timing, but when exactly does a note occur? Our perceived temporal locations ("P-centers") for notes are distinct from their acoustic onsets. We report on experiments which show that musicians with different musical backgrounds (e.g., jazz vs. classical) do not hear the same temporal location for instrumental notes, sung syllables, or spoken syllables. They shed light on the effect of musical expertise on the perception of musical speech, how that that expertise may carry over to speech perception, and how context cues expertise, thus informing debates regarding the relations between music and speech.

**Talk 9 Vincent Abdul-Sater (Montreal) (10:05 - 10:35): Defending the Inferential Step in Common Precursor Theories**

The family of theories linking music and language, known as 'common precursor theories' (e.g. musilanguage, 'Hmmmmm', protololanguage), posit a shared evolutionary origin for musical and linguistic capacities. Rudolf Botha critiques these theories, arguing that they make an unsupported inference from data on music-language overlap. Botha contends that this inference lacks sufficient empirical backing and is arbitrary. Recent studies in music cognition by Isabelle Peretz, Joshua De Leeuw, and Ani Patel, however, provide evidence supporting this inferential step. Thus, drawing on these findings, I refute Botha's interpretation of music's role in language evolution as misguided.

**Keynote 7 Aniruddh Patel (Tufts) (10:50 - 11:50): Cognitive and neural relations between predictive mechanisms in language and music**

In this talk I will present behavioral and neural research on musical melodic expectancy and discuss how these findings inform debates over relations between music and language processing in the brain.