

Colloquium April 17, 2026
Stephen McAdams (Schulich School of Music, McGill University)

Title: "Orchestration analysis through the lens of auditory grouping principles"

Abstract:

In everyday life, auditory grouping mechanisms structure the sound field into events and streams of events produced by sound sources to understand what is happening in the world. In music, composers intuitively use these principles to build complex events, connect them perceptually over time, group them into layers of greater or lesser prominence, and segment materials over more local to more global timespans. They can also trick listeners' auditory systems into hearing multiple sound sources as a single "virtual voice" through blending and use limits in concurrent and sequential perceptual analysis to create complex surface textures. I will present the Taxonomy of Orchestral Grouping Effects (McAdams, Goodchild & Soden, 2022, MTO) and through its lens analyses of passages of music by Ravel, Stravinsky, and Reynolds to illustrate the role grouping plays in orchestration practice.

Bio: Stephen McAdams studied music composition and theory at De Anza College in California before turning to perceptual psychology at McGill (BSc, 1977). He then studied psychoacoustics and auditory neuroscience at Northwestern University (1977-1979), continuing on to complete a PhD in Hearing and Speech Sciences at Stanford University (1984). In 1986, he founded the Music Perception and Cognition team at IRCAM-Centre Pompidou in Paris and organized the first conference on Music and the Cognitive Sciences there in 1988. He was a research scientist in the French CNRS (1989-2004) and then returned to McGill to direct the Centre for Interdisciplinary Research in Music Media and Technology (CIRMMT, 2004-2009). He holds the Canada Research Chair in Music Perception and Cognition and was recently awarded a Distinguished James McGill Professorship. In 2022, he was elected Fellow of the Royal Society of Canada and received a Lifetime Achievement Award from the Society for Music Perception and Cognition. He is currently interested in the perception and cognition of musical timbre applied to a psychological foundation for a theory of musical orchestration.