Program Schedule
October 4, 2014
Sears Atrium, George Vari Engineering and Computing Centre
245 Church Street, Ryerson University

Schedule:
08:30 am-09:00 am  Registration
09:00 am-09:10 am  Welcome (Naresh/Frank)
09:10 am-10:05 am  Keynote: Carol Krumhansl
10:10 am-11:10 am  Michael I. Mandel & Song Hui Chon: Using auditory bubbles to determine spectro-temporal cues of timbre identification
Tom Barker, Hugo Van Hamme, Tuomas Virtanen: Modelling the perceptual organisation of auditory streams in African xylophone music
Oriol Nieto & Morwaread M. Farhood: Multiple annotations and subjectivity in the identification of segmentation boundaries in music
11:10 am-11:20 am  Break
11:20 am-12:25 pm  Speed poster talks (see page 2)
12:25 pm-01:15 pm  Lunch/Poster session
01:30 pm-02:25 pm  Keynote: Douglas Eck
02:30 pm-03:50 pm  Johanna Devaney, Daniel Shanahan, Kirsten Nisula: Evaluating rule- and exemplar-based computational approaches for modeling harmonic function
Ji Chul Kim: Melodic pitch reduction and chord recognition in an oscillatory neural network model
Kai Siedenburg, Ichiro Fujinaga, Stephen McAdams: Clash of cultures? On audio features for timbre in music information research and music psychology
Naresh Vempala & Frank Russo/with WaveDNA: Customizing music emotion prediction using computational models
03:50 pm-04:00 pm  Break
04:00 pm-05:00 pm  Jacek P. Dmochowski, Blair Kaneshiro, Anthony M. Norcia, Jonathan Berger: Deriving the neural signatures of musical features using canonical correlation analysis
Audrey Laplante: The cognitive aspects of music information-seeking behaviour
Doug Van Nort: On the modeling of behavior in machine improvisation
05:00 pm-05:15 pm  Announcement of Student Prizes/Closing Remarks
Speed poster talks:

1. **Dora P. Rosati, Matthew Woolhouse, David J. D. Earn**  
   Song popularity as a contagious process
2. **Evan Jones**  
   A mathematical model of scale-degree qualia
3. **Michael D. Barone, Matthew Woolhouse, Nick Rogers, James Renwick, Mark Hahn**  
   Stadium love: The role of music in the exportation and expression of culture during massive global sporting events
4. **Eric Nichols, Douglas Hofstadter**  
   Modeling real-time listening and analogy-making
5. **Jorge Herrera**  
   Got rhythm? Network of nonlinear oscillators for beat tracking revisited
6. **James Renwick, Nick Rogers, Jotthi Bansal, Matthew Woolhouse**  
   One mind, many musics? Exploring genre exclusivity with respect to people’s music collections
7. **Chantal Belanger, Lauryn McLaren, Matthew Woolhouse**  
   Crowdsourcing study of cascading reminiscence bumps in music
8. **Gabriel Vigliensoni & Ichiro Fujinaga**  
   Time-shift normalization and listener profiling in a large dataset of music listening histories

**Carol L. Krumhansl, Cornell University**  
Popular music: The evolution of listening niches over generations

Cascading reminiscence bumps” (Krumhansl & Zupnick, Psychological Science, 2013) reported the results of a survey documenting intergenerational transfer of musical preferences from parents to contemporary young adults. The parents’ music (from their own late adolescence and early adulthood, the typical “reminiscence bump”) was associated with positive emotions and strong autobiographical memories in their children. In my talk, I will report the results of a new survey using 100 years of top hits and 6 decades of music listeners. We trace how listening niches have changed over time, where listening niches are characterized by the decade of the music, the age of the listener, with whom they were listening, the context, and the music media. All generations listened to their parents’ music with their parents and also exhibit the typical “reminiscence bump”. However, earlier generations, unlike contemporary young adults, listened to very different music with their parents and their friends growing up.

**Douglas Eck, Staff Research Scientist, Google**  
Recommendation in a streaming music service: What do users really want?

I will discuss recent work done at Google to tackle the problem of music recommendation in a streaming music service. I’ll present state-of-the-art methods for generalizing from user listening behavior using collaborative filtering. I’ll talk about using audio features as a means to improve quality and to go deep into the long tail. Finally I’ll discuss using Freebase to provide structured data about the world of music. An overarching theme in the talk is, “What do listeners really want from an online music service?” It is not enough to offer access to a commercial music catalog; users also need tools and interfaces that make it easy and fun to explore such an enormous space.