## Seminar Series Topics in the Aesthetics of Music and Sound

## Thursday, September 18, 2014 3:15-5 p.m. in U67

## The Real "All-singing, All-dancing" Thing: Sound Production and Communication in Songbirds



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**Abstract:** Humans possess the ability to learn language-specific sounds from other humans in a process called vocal

imitation learning. Surprisingly, our genetically closest relatives, the great apes, are not capable of vocal learning and all their vocalizations are innate. While considered a uniquely human feature long ago, we now know many other animals can learn their vocalizations, such as bats, whales, and many birds. Especially the songbirds have developed into an important model system for vocal learning, but also for answering

some of the most fundamental questions in behavioral neuroscience. Song behavior depends on the integrated action of neural systems for auditory perception, song production, song learning and the processing of social information. Interestingly, while we have identified many components of the specialized and interacting neural circuits, we lack mechanistic insights into their function. In this presentation, I introduce the beautiful birdsong system and discuss similarities and differences in mechanisms of sound production and control with humans.



## All are welcome - also via Skype 🐇

