Refining UG: Connecting Phonological Theory and Learning
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Computational modeling is playing an increasingly central role in phonological theory and argumentation. In this talk, I focus on applications of computational modeling to a fundamental question of linguistics: what biases and principles must UG encode? Modeling, especially statistical modeling, enables explicit, testable connections between phonological theory on the one hand and corpus and experimental data on the other, and these connections have led to a range of novel results that refine our understanding of phonological structure, learning, and change. This integrative approach makes it possible to examine the kinds of principles and biases that may be derivable from general learning principles or systematic properties of the data, and which therefore may not need to be encoded in UG a priori. Conversely, linguistically sophisticated statistical learning models have also made it possible to pursue new sources of evidence for the necessity of universal constraints on the language acquisition device. My talk discusses examples of both sorts. I review some emerging themes in this growing literature and then focus on several examples from my recent work in phonological learning that seek to better understand the complex interactions between domain-general learning principles and language universals.