Learning lexical idiosyncrasy in a probabilistic world Claire-Moore-Cantwell, SFU

Although speakers have implicit knowledge of phonological trends across the words of their lexicons (Ernestus and Baayen 2003, Hayes et al 2009, et seq.), in many cases individual items behave idiosyncratically (Zuraw 2016). During acquisition, the learner must memorize details about each word, at the same time as using those words to learn a phonological grammar.

In this talk, I present a computational model that simultaneously learns the idiosyncratic properties of words and phonological generalizations over them. Features of a lexical item (e.g. stress pattern) are represented with continuously-valued weights, simulating the memory strength associated with each feature of a word. These features