University of Southern California

USC

Department of Biomedical Engineering Division of Biokinesiology and Physical Therapy

Engineering Neuroscience & Health Seminar Series Presents: **Dr. Louis Goldstein** Louisgol@usc.edu	**Monday** **October 6, 2008** **4:00 p.m.** **Refreshments will be served 3– 4 p.m.**	**Locations:** *Seminar is simultaneously presented* **UPC: HNB 100 – LIVE** **Hedco Neurosciences Building** UPC Campus Map/Directions: http://www.usc.edu/about/visit/upc/ **HSC: 147 – Video Conference** **Center for the Health Professional** HSC Campus Map/Directions: http://www.usc.edu/about/visit/hsc/

Combinatorial Phonology: Vocal gestures and their coupling

Human speech can be analyzed as a dance of the vocal organs formed from a small number of discrete steps, or gestures, that are largely shared across the world's languages. Words in languages are formed by (re-)combining these gestures into large numbers of distinct dances, whose temporal patterning can be modeled by a planning system of coupled oscillators. This approach to speech (called "articulatory phonology") will be introduced in this talk, along with supporting data and simulations. Issued to be addressed include the biological basis for discrete gestures, how coupled oscillators can be used to model the formation of the dance, and implications for other speech-related systems and problems (e.g., reading).

Web Cast
http://capture.usc.edu/college/Catalog/?cid=af180d48-ceff-42b9-a35c-eb199daed320

Information about all seminars can be found at
http://www-clmc.usc.edu/~heiko/ENH