## Vortrag am 27. 2. 2019, 16 Uhr im Seminarraum

## Leonardo Lancia (CNRS and Laboratoire de Phonétique et Phonologie, Paris)

Relations between the coordinative, rhythmic and melodic dimensions of speech patterns

To control the coordinated activity of the many partially independent components of the speech motor system we modulate the constraints shaping the interactions between the component systems. This principle has mainly been applied to explain how speech gestures, considered as the basic building blocks of the speech chain, are produced. The coordination between speech gestures structures the syllables; which are in turn coordinated to form higher prosodic units, and which provide the anchoring for F0 movements. In this talk we will explore the hypothesis that the mutual dependencies between these levels (and potentially others) of organization of the speech chain shapes the rhythmic features of the speech signal. I will present data from 5 European languages showing that the strength of the coordination between the production of syllables and that of prosodic prominence is indeed a dimension relevant for rhythmic typology. I will then present some pilot data from an ongoing study relating these results to the strategies adopted by different languages to resolve the tension between the control of F0 and that of acoustic energy. Time permitting, the last part of this talk will address a complementary line of research relating the rhythmic properties of the speech signals to features of inter-speaker coordination in verbal interactions.