## Title

Seminar in phonetics and phonology: speech variation, language change, and computational modelling

## Convenor

Prof. Dr. Jonathan Harrington, Institute of Phonetics and Speech Processing, Ludwig-Maximilians University of Munich.

## Content

The seminar is concerned with using computational models applied to speech data of multiple words and speakers for predicting the direction of sound change. The seminar draws upon several topics at the intersection of computer science, linguistics, sociology, and the speech sciences. Some of the main issues to be considered are as follows.

- 1. Measuring sound change from longitudinal studies of speech in which the speech of individuals is resampled at several points in time.
- 2. Speech dynamics and the synchronic basis for historical sound change.
- 3. Physiological techniques (in particular ultrasound and real-time magnetic resonance imaging) for quantifying speech dynamics and synchronic variation.
- 4. Computational, agent-based modelling and its relevance for modelling the relationship between synchronic variation and diachronic language change.
- 5. Using speech and language corpora to model the relationship between language change and language typology.

The seminar will draw upon research being carried out as part of a current European Research Council project (2017-2022) at the IPS Munich (J. Harrington: 'Human Interaction and the Evolution of Spoken Accent'. Project no.: 742289).

## Schedule

The seminar will take place on four days from Monday  $13^{\rm th}$  – Thursday 16th May 2019 inclusive.

