

# TGIF

## THE NTU LINGUIST CHATROOM

### Articulatory characterisation of Singapore Mandarin Tones using Laryngeal Ultrasound

Previous acoustic studies on Mandarin tones have traditionally focused on standard varieties of Mandarin spoken in Beijing or Taiwan. While studies on Singaporean Mandarin tones remain relatively scant, existing research has indicated that tones in this variety of Mandarin differ from the other variants in terms of syllable duration and f<sub>0</sub> contour. Tone production is a complex process linked quantitatively with various physiological correlates—one such mechanism is the vertical movement of the larynx, which is a critical component of f<sub>0</sub> control. The physiology of pitch control has, to date, remained unexamined in relation to Singapore Mandarin tones.

In light of the differences between Singapore Mandarin and other variants of Mandarin, the present study will examine the production of four lexical tones in 11 native speakers of Singapore Mandarin using Laryngeal Ultrasound, so as to provide an acoustic and articulatory account of Singapore Mandarin. Findings revealed an inverse relationship between larynx height and f<sub>0</sub> for the production for some tones, which could plausibly be attributed to laryngeal medialisation, a novel phenomenon discovered in this study.

#### ABOUT THE SPEAKER



**Dawn Poh** is a PhD student at the department of Linguistics and Multilingual Studies, Nanyang Technological University. Her research interests include the physiology of sound production, particularly in relation to Singapore Mandarin tones.

#### WEBINAR ●

Date: 2 October 2020  
Time: 1.30pm-2.30pm

#### ZOOM INFORMATION ●

Register at  
<https://tinyurl.com/tgif-dawn>

or scan QR code



#### CONTACT ●

Dr Francesco Perono  
Cacciafoco  
[fcacciafoco@ntu.edu.sg](mailto:fcacciafoco@ntu.edu.sg)