Session 1 Modeling: Monday 12/14 7:30-8:30,11:15-12:15 EST (UTC-5)

| Session # | Paper<br>ID | Authors  | Title  |
|-----------|-------------|--|--|
| 1         | 9           | Matti Groll, Victoria McKenna, Surbhi Hablani and Cara Stepp   | Formant-estimated vocal tract length and extrinsic laryngeal muscle activation during modulation of vocal effort in healthy speakers |
| 2         | 32          | Yeonggwang Park, Manuel Diaz-Cadiz, Kathleen Nagle and Cara Stepp  | Perceptual and acoustic assessment of strain using synthetically modified voice samples  |
| 3         | 36          | François-Xavier Brajot   | Sources and interactions of long-term phonatory instabilities  |
| 4         | 54          | Sam Tilsen and Anne Hermes   | Nonlinear effects of speech rate on articulatory timing in singletons and geminates  |
| 5         | 67          | Konstantin Sering, Paul Schmidt-Barbo, Sebastian Otte, Martin V. Butz and Harald Baayen                                | Recurrent Gradient-based Motor Inference for Speech Resynthesis with a Vocal Tract Simulator   |
| 6         | 69          | Tanner Sorensen, Mark Tiede, Adam Lammert, Louis Goldstein and<br>Shrikanth Narayanan                                  | Fitts' law in tongue and lip movements of repetitive speech  |
| 7         | 82          | Ioannis Douros, Chrysanthi Dourou, Yu Xie, Jacques Felblinger, Karyna<br>Isaieva, Pierre-André Vuissoz and Yves Laprie | Synthesize MRI vocal tract data during CV production   |
| 8         | 96          | Pramit Saha, Yadong Liu, Bryan Gick and Sidney Fels  | Ultra-Arti-Synth - Articulatory Vowel Synthesis from Ultrasound Tongue   |
| 9         | 104         | Asterios Toutios and Shrikanth Narayanan   | Simulating anticipatory coarticulation in VCV utterances with a gestural articulatory synthesizer                                    |
| 10        | 129         | Leonardo Lancia, Jinyu Li and Louis Goldstein  | Complexity patterns underlying speech production activity  |
| 11        | 142         | Debasish Ray Mohapatra, Victor Zappi and Sidney Fels   | A comparative study of two-dimensional vocal tract acoustic modeling based on Finite-Difference Time-Domain methods                  |
| 12        | 163         | Jaekoo Kang, Hosung Nam and Whalen D. H.   | Modeling the null space of speech production using flow-based Invertible Neural Networks   |
| 13        | 168         | Marc-Antoine Georges, Pierre Badin, Julien Diard, Laurent Girin, Jean-<br>Luc Schwartz and Thomas Hueber               | Towards an articulatory-driven neural vocoder for speech synthesis   |
| 14        | 180         | Anastasiia Tsukanova, Ioannis Douros and Yves Laprie   | DNN-based parametric speech synthesis enhanced with articulatory information   |
| 15        | 191         | Mohammed Salah Al-Radhi, Tamás Gábor Csapó and Géza Németh   | conTTS: Text-to-Speech Application using a Continuous Vocoder  |
| 16        | 201         | Bernd Kroeger, Trevor Bekolay, Peter Blouw and Terence Stewart   | Developing a model of speech production using the Neural Engineering Framework (NEF) and the Semantic Pointer Architecture (SPA)     |
| 17        | 218         | Alexei Kochetov, Christophe Savariaux, Laurent Lamalle, Camille Noûs and Pierre Badin                                  | Malayalam three-way rhotic contrast: Articulatory modelling based on MRI data  |
| 18        | 229         | Noor Al-Zanoon, Jacqueline Cummine, Caroline Jeffery and Daniel Aalto  | Is styloglossus critical for tongue elevation? A computer simulation investigation of styloglossus recruitment in tongue elevation   |

Session 2 Speech Motor Control / Neuroscience: Monday 12/14 8:45-9:45, 12:30-13:30 EST (UTC-5)

| Session # | Paper<br>ID | Authors  | Title  |
|-----------|-------------|--|--|
| 1         | 12          | Benjamin Parrell and Adam C. Lammert   | Modeling adaptation in speech motor control  |
| 2         | 19          | Camille Vidou, Cristina Uribe, Tarik Boukhalfi, David Labbé and Lucie<br>Ménard  | Compensatory responses to real-time perturbation of visual feedback during vowel production  |
| 3         | 21          | Nina R Benway, Tara McAllister, Elaine Hitchcock and Jonathan L Preston  | Comparing Biofeedback Types for Children with Residual Speech Production Errors on /ɹ/   |
| 4         | 40          | Stefanie Keulen, Kat Dobson, Jidde Jacobi, Teja Rebernik, Martijn<br>Wieling, Mark Tiede, Anna Jansen and Philippe Paquier                                 | An electromagnetic articulographic investigation of feedback mechanisms in childhood apraxia of speech.  |
| 5         | 58          | Miriam Oschkinat, Simone Dalla Bella, Simone Falk and Philip Hoole   | Sensorimotor Adaptation to Temporal Auditory Feedback Perturbation and its Relation to Motor Variability in General Timing Tasks               |
| 6         | 68          | Benjamin Parrell, Mark Tiede, Vince Gracco and Doug Shiller  | Kinematic evidence of centering during vowel production  |
| 7         | 97          | Hannah Rowe, Marc Maffei, Sarah Gutz, Adam Lammert and Jordan<br>Green   | Profiling Speech Motor Control: Validation of Novel and Existing Acoustic Features   |
| 8         | 105         | Benjamin Parrell and Caroline Niziolek   | Formant variability is actively regulated in vowel production  |
| 9         | 106         | Pierre Baraduc and Pascal Perrier  | Tongue motor control stability: integrating feedback, dynamical internal representation and optimal planning                                   |
| 10        | 110         | Sara-Ching Chao and Ayoub Daliri   | Contributions of performance and prediction errors in speech motor learning  |
| 11        | 120         | Dan Cameron Burgdorf   | Compensation for Altered Feedback in Vowels and Glides   |
| 12        | 136         | Robin Karlin, Chris Naber and Benjamin Parrell   | Auditory feedback is used for both online and adaptive control of timing in speech   |
| 13        | 143         | Hantao Wang and Ludo Max   | Does the extent of acoustic variability prior to an auditory perturbation affect motor learning in speech production?                          |
| 14        | 153         | Jessica Gaines, Hardik Kothare, Inez Raharjo, Kamalini Ranasinghe,<br>Richard Ivry, Benjamin Parrell, Zarinah Agnew, Srikantan Nagarajan and<br>John Houde | State feedback control model can account for differences in abnormal pitch perturbation responses in Alzheimer's disease and cerebellar ataxia |
| 15        | 158         | Jinyu Li and Leonardo Lancia   | Speech production in response to multiple perturbations of auditory feedback   |
| 16        | 182         | Elizabeth Casserly, Anna Barnes and Lauren Barrett   | Speech intelligibility decreases with degradation of somatosensory feedback via topical benzocaine application                                 |
| 17        | 187         | (Withdrawn)  |  |
| 18        | 11          | Takayuki Ito, Jiachuan Bai and David Ostry   | Relationship between sensory memory and speech motor learning  |
| 19        | 15          | Jasmine Lee, Annie Gilbert, Shanna Kousaie, Denise Klein and Shari<br>Baum   | Exploring the Relationship Between Prosodic Cue Production and Functional Connectivity in the Bilingual Brain                                  |
| 20        | 29          | Roozbeh Behroozmand, Leonardo Bonilha, Chris Rorden, Gregory Hickok and Julius Fridriksson   | Impaired Efference Copy Mechanisms of Speech in Post-Stroke Aphasia and the Role of Dorsal Stream Network                                      |
| 21        | 41          | Daniel Lametti and Douglas Shiller   | Sensorimotor Learning and Transfer During English and French Sentence<br>Production in Bilinguals  |
| 22        | 46          | Mohammad Darainy, Brian Liu and David Ostry  | Somatosensory Cortex Involvement in the Consolidation of Speech Motor Learning   |
| 23        | 107         | Hilary Miller, Claire Cordella, Jessica Collins, Rania Ezzo, Megan Quimby, Jason Tourville, Frank Guenther and Bradford Dickerson                          | Evidence for a Phonological Output Buffer in Posterior Inferior Frontal Sulcus from Repetition Deficits in Primary Progressive Aphasia         |
| 24        | 133         | Gregg Castellucci, Christopher Kovach, Hiroyuki Oya, Jeremy Greenlee and Michael Long  | Dynamics of cortical activity underlying interactive language use  |
| 25        | 144         | Caroline Spencer, Jennifer Vannest, Suzanne Boyce, Edwin Maas,<br>Jonathan Preston and Erin Redle  | Neural changes in children with residual speech sound disorder (RSSD) after ultrasound biofeedback therapy                                     |
| 26        | 169         | Saul A. Frankford, Shanqing Cai, Jason A. Tourville, Alfonso Nieto-<br>Castañón, Matthew Masapollo, Elizabeth S. Heller Murray and Frank H.<br>Guenther    | The Neural Circuitry Underlying the "Rhythm Effect" in Stuttering  |
| 27        | 175         | Mariana Vasilita, Oonamaria Toussaint, Uliana Bernatska and Laura Spinu  | Exploring the connection between phonetic learning and auditory sensory memory in monolinguals and bilinguals                                  |
| 28        | 227         | Joy Hirsch, Mark Tiede, Adam Noah and Xian Zhang   | Neural and acoustic characteristics of agreement vs. disagreement in dyadic debate observed using fNIRS hyperscanning                          |

Session 3 Speech Production Across the Lifespan (Developmental / Elder Speech): Tuesday 12/15 7:15-8:15, 12:30-13:30 EST (UTC-5)

| Session # | Paper<br>ID | Authors   | Title   |
|-----------|-------------|---|---|
| 1         | 10          | Linda Polka, Matthew Masapollo and Lucie Ménard   | Setting the stage for speech production: Infants prefer listening to speech sounds with infant vocal properties                     |
| 2         | 26          | Mária Gósy  | Temporal patterns of Hungarian words across childhood   |
| 3         | 49          | Heather Kabakoff, Olesia Gritsky, Joanne Jingwen Li, Samantha Ayala,<br>Elaine R. Hitchcock, Jonathan L. Preston, Daphna Harel, Douglas M.<br>Shiller and Tara McAllister | Tracking development of somatosensory acuity: Age-based comparison of three measures  |
| 4         | 95          | Angélina Bourbon and Anne Hermes  | Have a break: Aging effects on sentence production and structuring in French  |
| 5         | 103         | Elina Rubertus and Aude Noiray  | Anticipatory and carryover coarticulation share a similar origin: evidence from child speech  |
| 6         | 109         | Stella Krüger and Aude Noiray   | Are developmental differences in vocalic lingual anticipation perceivable? Insights from German child and adult listeners.          |
| 7         | 111         | Anisia Popescu and Aude Noiray  | Coarticulatory organization in beginner readers: a multifactorial interaction approach  |
| 8         | 113         | Elina Rubertus and Anisia Popescu   | Development of coarticulation: comparing modalities in beginner readers   |
| 9         | 121         | Laura Koenig, Areti Okalidou and George Kyriafinis  | Comparing short- and longer-term measures of nasal coarticulation in Greek children with cochlear implants and normal-hearing peers |
| 10        | 128         | Elaine R. Hitchcock, Laura L. Koenig and Laura Ochs   | Exploring voice onset time, place of articulation, and vowel context in children  |
| 11        | 130         | Melissa Xu, Asterios Toutios, Tanner Sorensen and Shrikanth Narayanan   | Using real-time MRI to assess the development of jaw contribution in constriction formation synergies during early adolescence      |
| 12        | 132         | Fábio Barros, Samuel Silva, Luciana Albuquerque, Ana Rita S. Valente,<br>António Teixeira, Paula Martins and Catarina Oliveira  | Towards the use of ultrasonography to study aging effects in vowel production   |
| 13        | 137         | Daria D'Alessandro, Angélina Bourbon and Cécile Fougeron  | Effect of age on rate and coarticulation across different speech-tasks  |
| 14        | 147         | Dzhuma Abakarova, Khalil Iskarous and Aude Noiray   | Articulatory strategies and coarticulatory patterns across age  |
| 15        | 167         | Mark Gibson, Ferenc Bunta, Charles Johnson and Miriam Huárriz   | The development of syllable timing by children with cochlear implants and their peers with normal hearing.                          |
| 16        | 230         | Anna Kohári, Uwe D. Reichel, Alexandra Markó and Katalin Mády   | Breathiness in speech directed to 4-month-old infants   |

Session 4 Disordered Speech: Tuesday 12/15 9:45-10:45, 15:30-16:30 EST (UTC-5)

| Session # | Paper<br>ID | Session 4 Disordered Speech: Tuesday 12/15 9:48  Authors  | Title   |
|-----------|-------------|---|---|
| 1         | 14          | Adam Lammert, James Williamson, Nadee Seneviratne, Carol Espy-Wilson and Thomas Quatieri  | A Coupled Oscillator Planning Account of the Speech Articulatory Coordination Metric With Applications to Disordered Speech                               |
| 2         | 38          | Barbara Gili Fivela, Sonia Immacolata d'Apolito and Giorgia Di Prizio   | Labialization in Italian Dysarthric Speech by Parkinsonian Speakers   |
| 3         | 56          | Alicia Janz, Simon Wehrle and Martine Grice   | Effects of unexpectedness on turn-transitions in adults with Autism Spectrum Disorder   |
| 4         | 59          | Laura Machart, Anne Vilain, Hélène Lœvenbruck and Lucie Ménard  | Influence of French Cued Speech on consonant production in children with cochlear implants: an ultrasound study   |
| 5         | 60          | Emily Garnett, Ho Ming Chow, Megan Sheppard, Gregory Spray and Soo-<br>Eun Chang  | Effects of HD-tDCS on speech fluency in adults who stutter: a randomized controlled trial   |
| 6         | 63          | Anneke Slis, Cecile Fougeron, Michaela Pernon and Leonardo Lancia   | On the use of low-level spectral features to distinguish speakers with Parkinson's disease from typical speakers.   |
| 7         | 73          | Jidde Jacobi, Teja Rebernik, Roel Jonkers, Ben Maassen, Michael Proctor and Martijn Wieling   | Characterizing tongue tremor in Parkinson's disease using EMA   |
| 8         | 75          | Adam Vogel and Benjamin Schultz   | Features of speech and swallowing dysfunction in pre-ataxic<br>Spinocerebellar Ataxia Type 2  |
| 9         | 76          | Benjamin Schultz and Adam Vogel   | A machine learning algorithm to identify neuromuscular speech disorders from acoustic profiles  |
| 10        | 78          | Benjamin Schultz and Adam Vogel   | Automated extraction of voice onset time in healthy and pathological speech   |
| 11        | 83          | Ramona Schreier, Simone Dalla Bella, Philip Hoole and Simone Falk   | Verbal timing deficits in stuttering  |
| 12        | 90          | Virginie Roland, Véronique Delvaux, Kathy Huet, Myriam Piccaluga and Bernard Harmegnies   | Imprecision of vowel production as a potential subclinical marker in Parkinson's disease  |
| 13        | 92          | Milica Janić, Teja Rebernik, Pauline Veenstra, Emma Wissink, Martijn Wieling, Michael Proctor   | Vowel production in congenitally blind and sighted Australian English speakers  |
| 14        | 101         | Anneke Slis, Christophe Savariaux, Silvain Gerber, Maeva Garnier and Pascal Perrier   | Complexity of Rhythmic Tapping Task and Stuttering  |
| 15        | 108         | Tabea Thies, Doris Muecke, Richard Dano and Michael T. Barbe  | Correlation between levodopa response and acoustic parameters of prominence marking as well as tongue body movements in patients with Parkinson's disease |
| 16        | 114         | Tanya Talkar, James Williamson, Daniel Hannon, Hrishikesh Rao, Sophia<br>Yuditskaya, Douglas Sturim, Kajal Claypool, Lisa Nowinski, Hannah Saro,<br>Carol Stamm, Maria Mody, Chris McDougle and Thomas Quatieri | Assessment of Speech Subsystem Interactions in Children with Autism Spectrum Disorder   |
| 17        | 125         | Graham Flick, Florencia Assaneo, Joan Orpella and Eric S. Jackson   | Temporal Dynamics of Stuttered Speech   |
| 18        | 138         | Daniel M. Low, Elyse Shenberger, Kate H. Bentley, Randy P. Auerbach, Stewart Shankman and Satrajit S. Ghosh   | Automated assessment of mental health symptoms using audio and text features from speech  |
| 19        | 149         | Mairym Llorens Monteserin   | Variability in duration of Tourette's verbal tics that are temporally adjacent to speech  |
| 20        | 162         | Noé Xiu, Béatrice Vaxelaire, Jean-François Rodier, Pierre-Philippe<br>Volkmar and Rudolph Sock  | Post-thyroidectomy and Perturbation of Aerodynamic and Acoustic Parameters  |
| 21        | 164         | Nadee Seneviratne, Carol Espy-Wilson, James Williamson, Adam<br>Lammert and Thomas Quatieri   | Classification of Depression by Quantifying Neuromotor Coordination Using Inverted Vocal Tract Variables  |
| 22        | 166         | Maeva Garnier, Anneke Slis, Christophe Savariaux and Anaïs Da Fonseca   | Physiological continuum of atypicality between fluent and stuttered stop consonants   |
| 23        | 185         | Maureen Stone, Natalie Miller, Ghady Alsaty, Lisa Honig, Joshua Lubek, Jiachen Zhuo and Jerry Prince  | Does asymmetry in tongue anatomy affect asymmetry in tongue position? Glossectomy and control subjects.   |
| 24        | 196         | Yashish Maduwantha H P E R S, Carol Espy-Wilson, Deanna L. Kelly and Chris Kitchen  | Inverted Vocal Tract Variables and Facial Action Units to Quantify Neuromotor Coordination in Schizophrenia   |
| 25        | 203         | Heather Kabakoff, Graham Tomkins Feeny, Daphna Harel, Mark Tiede,<br>Jonathan L. Preston, D.H. Whalen and Tara McAllister   | Characterizing Sensorimotor Profiles in Children with Residual Speech Errors  |
| 26        | 215         | Judit Bóna, Veronika Svindt and Ildikó Hoffmann   | Voice onset time of Hungarian voiceless plosives in Multiple Sclerosis  |
| 27        | 231         | Mona Franke, Christopher T. Kello, Philip Hoole and Simone Falk   | Temporal organization during oral reading in children and adolescents who stutter   |
| 28        | 242         | Caterina Petrone, Melody Zira, Christelle Zielinski, Elisa Sneed German and Noémie Moreau   | Speech planning in question-response interactions from a clinical perspective   |

Session 5 Methods / Speech Technology: Wednesday 12/16 7:30-8:30, 11:15-12:15 EST (UTC-5)

| Session # | Paper<br>ID | Authors  | Title   |
|-----------|-------------|--|---|
| 1         | 6           | Teja Rebernik, Jidde Jacobi, Roel Jonkers, Aude Noiray and Martijn<br>Wieling  | Experimental approaches in electromagnetic articulography   |
| 2         | 16          | Simon Stone and Peter Birkholz   | Articulation-to-Speech using Electro-Optical Stomatography and articulatory synthesis   |
| 3         | 17          | Simon Stone, Peter Birkholz, Atilla Azgin and Sabrina Mänz   | Prospects of Articulatory Text-to-Speech Synthesis  |
| 4         | 25          | Riwei Jin, Xi Peng and Brad Sutton   | Shortening total acquisition times for high speed dynamic speech magnetic resonance imaging using temporally sparse navigation                              |
| 5         | 34          | Kele Xu, Tamás Gábor Csapó, Dawei Feng and Haibo Mi  | Ultrasound Tongue Gestural Sequence Classification Using Convolutional Auto-encoder and Recurrent Neural Network  |
| 6         | 81          | Ioannis Douros, Yu Xie, Chrysanthi Dourou, Jacques Felblinger, Karyna<br>Isaieva, Pierre-André Vuissoz and Yves Laprie | Vocal tract sagittal slices estimation from MRI midsagittal slices during speech production of CV   |
| 7         | 85          | Karyna Isaieva, Yves Laprie, Alexis Houssard, Jacques Felblinger and Pierre-André Vuissoz                              | Tracking the tongue contours in rt-MRI films with an autoencoder DNN approach   |
| 8         | 88          | Kohichi Ogata, Kento Yamamoto and Masami Ito   | Usefulness of inverse estimation using a vocal tract mapping interface for estimating articulatory behavior   |
| 9         | 91          | Yujie Chi, Kiyoshi Honda, Zhao Zhang and Jianguo Wei   | Comparison of External Photoglottogram and Electroglottogram  |
| 10        | 93          | Aravind Illa and Prasanta Ghosh  | Complexity-performance trade-off in acoustic-to-articulatory inversion  |
| 11        | 94          | Anusuya P K, Aravind Illa and Prasanta Ghosh   | A data-driven phoneme-specific analysis of articulatory importance  |
| 12        | 99          | Nuno Almeida, Samuel Silva, António Teixeira and Conceição Cunha   | Collaborative Quantitative Analysis of RT-MRI   |
| 13        | 126         | Amélie Elmerich, Angélique Amelot, Shinji Maeda, Yves Laprie, Jean-<br>François Papon and Lise Crevier-Buchman         | F1 and F2 measurements for French oral vowel with a new pneumotachograph mask   |
| 14        | 155         | Ganesh Sivaraman, Nadee Seneviratne and Carol Espy-Wilson  | Multitask learning based multi-corpus acoustic-to-articulatory speech inversion   |
| 15        | 160         | Pramit Saha, Debasish Ray Mohapatra and Sidney Fels  | SPEAK WITH YOUR HANDS - Using Continuous Hand Gestures to control Articulatory Speech Synthesizer   |
| 16        | 161         | Wei-Rong Chen, Mark Tiede and D. H. Whalen   | DeepEdge: automatic ultrasound tongue contouring combining a deep neural network and an edge detection algorithm  |
| 17        | 188         | Tamás Gábor Csapó, Kele Xu, Andrea Deme, Tekla Etelka Gráczi and<br>Alexandra Markó                                    | Transducer Misalignment in Ultrasound Tongue Imaging  |
| 18        | 194         | Hardik Kothare and Vikram Ramanarayanan  | Remote monitoring of respiratory function using a cloud-based multimodal dialogue system  |
| 19        | 195         | Jessica Gaines, Kwang Kim, Benjamin Parrell, Vikram Ramanarayanan,<br>Srikantan Nagarajan and John Houde               | Discrete constriction locations describe a comprehensive range of vocal tract shapes in the Maeda model   |
| 20        | 208         | Jalal Al-Tamimi and Pertti Palo  | Quantifying gradience of epilaryngeal constriction in Levantine Arabic "gutturals": A Generalized Additive Modelling approach to ultrasound tongue contours |
| 21        | 213         | Jalal Al-Tamimi, Matthias Heyne and Donald Derrick   | From SS-ANOVA to GAMMs: Accounting for within and between-subject variation using generalized additive mixed models on ultrasound tongue contours           |
| 22        | 234         | Matthew Faytak, Scott Moisik and Pertti Palo   | The Speech Articulation Toolkit (SATKit): ultrasound image analysis in Python   |
| 23        | 45          | Donna Erickson, Oliver Niebuhr, Wentao Gu, Ting Huang and Puyang<br>Geng   | The MARRYS cap: A new method for analyzing and teaching the importance of jaw movements in speech production  |

Session 6 Speech Prosody: Wednesday 12/16 8:45-9:45, 12:30-13:30 EST (UTC-5)

| Session<br># | Paper<br>ID | Authors  | Title  |
|--------------|-------------|--|--|
| 1            | 13          | Christopher Carignan, Núria Esteve-Gibert, Hélène Lœvenbruck, Marion<br>Dohen and Mariapaola D'Imperio | Alignment of head nods in French focus: an EMA study   |
| 2            | 23          | Lena Pagel, Simon Roessig and Doris Mücke  | Modifications of tongue body kinematics as a focus marking strategy in German                    |
| 3            | 28          | Maolin Wang, Zhouyu Chen and Lijie Hua   | A study on the pattern of focal lengthening in Chinese   |
| 4            | 42          | Lia Saki Bucar Shigemori and Marianne Pouplier   | Realization of F0 on vocalic and consonantal nuclei in Slovak                                    |
| 5            | 47          | Jelena Krivokapic, Will Styler and Dani Byrd   | The role of speech planning in the articulation of pause postures                                |
| 6            | 71          | Yubin Zhang  | Consonant F0 is not intrinsic perturbations: A case study of Nuosu Yi                            |
| 7            | 102         | Ioana Chitoran, Giuseppina Turco and Hiyon Yoo   | Durational effects of boundaries in Italian fricatives   |
| 8            | 116         | Doris Muecke, Tabea Thies, Jane Mertens and Anne Hermes  | Age-related effects of prosodic prominence in vowel articulation                                 |
| 9            | 140         | (Withdrawn)  |  |
| 10           | 154         | Pamela Trudeau-Fisette, Marie Bellavance-Courtemanche and Lucie<br>Menard                              | Prosodic strengthening at the edges of prosodic boundaries in sighted and blind adult speakers   |
| 11           | 159         | Karen Tsai, Jiyoung Jang and Argyro Katsika  | The role of prominence in phrase-final lengthening: a cross-linguistic comparison                |
| 12           | 170         | Christopher Geissler, Jason Shaw, Mark Tiede and Fang Hu   | Eccentric C-V timing across speakers of diaspora Tibetan with and without lexical tone contrasts |
| 13           | 189         | Seung-Eun Kim and Sam Tilsen   | Temporal localization of syntactically conditioned prosodic information                          |
| 14           | 202         | Isabelle Franz, Christine Knoop, Gerrit Kentner, Sascha Rothbart and Winfried Menninghaus              | Syllable prominence and prosodic phrasing in spoken prose  |
| 15           | 205         | Ludger Paschen, Susanne Fuchs and Frank Seifart  | Phonological vowel length interacts with final lengthening                                       |
| 16           | 220         | Rael Stanley, Marija Tabain, David Bradley and Defen Yu  | Tone and Phonation in Northern Lisu  |
| 17           | 226         | Gerrit Kentner, Isabelle Franz, Christine Knoop and Winfried Menninghaus                               | Pause duration and other prosodic boundary cues are not monotonically correlated                 |
| 18           | 236         | Christian DiCanio and Jared Sharp  | Initial weakening in Mixtecan Languages?   |
| 19           | 239         | Una Chow   | Acoustic correlates of question-final Cantonese tones  |
| 20           | 165         | Maeva Garnier, Marine Barbé, John Smith and Joe Wolfe  | Tuning of vocal tract resonances in shouted voice  |

Session 7 Wide World of Speech Production: Thursday 12/17 7:30-8:30, 11:15-12:15 EST (UTC-5)

| Session # | Paper<br>ID | Authors  | Title  |
|-----------|-------------|--|--|
| 1         | 65          | Donna Erickson, Sayoko Takano, Yongwei Li, Jaiyin Gao, Shigeto<br>Kawahara, Kerrie Obert, Kyoko Takahashi and Masato Akagi     | Source and filter contributions to voice quality differences   |
| 2         | 77          | Ian Calloway   | An analysis of the articulatory factors contributing to perceptual asymmetry                           |
| 3         | 123         | Alexis Dehais Underdown, Paul Vignes, Didier Demolin and Lise Crevier<br>Buchman   | Human Beatboxing : A preliminary study on temporal reduction   |
| 4         | 150         | Chenhao Chiu, Bo-wei Chen and Yining Weng  | Vowel acoustics and tongue postures across different head angles                                       |
| 5         | 157         | Venkata Praneeth Srungarapu, Pramit Saha and Sidney Fels   | Speed-Accuracy Trade-off In Speech Production  |
| 6         | 165         | (Moved to Session 6 Speech Prosody)  |  |
| 7         | 173         | Yueh-Chin Chang, Feng-Fan Hsieh, Song Jiang, Jing Huang and Tzu-<br>Hsuan Yang   | How retroflex apical vowels can be suffixed with the rhotic suffix in Mandarin dialects                |
| 8         | 190         | Defne Abur, Joseph Perkell and Cara Stepp  | Effects of Vocal Effort on Respiratory and Articulatory Kinematics                                     |
| 9         | 192         | Ajinkya Kulkarni, Ioannis Douros, Vincent Colotte and Denis Jouvet   | Emotion recognition from phoneme-duration information  |
| 10        | 193         | Elisabeth Lynn, Shrikanth Narayanan and Adam Lammert   | Vocal Tract Shaping and Dark Tone Quality - An Investigation Using Real-<br>Time MRI                   |
| 11        | 210         | Asuka Ono, Momoko Nakatani, Ai Nakane, Junji Watanabe and Sadao<br>Hiroya  | Effects of vibrotactile stimuli on perception of voiced and unvoiced bilabial stop consonants in noise |
| 12        | 222         | Juergen Trouvain, Raphael Werner, Susanne Fuchs and Bernd Möbius   | Exploring the presence and absence of inhalation noises when speaking and when listening               |
| 13        | 223         | Alina Zöllner, Christine Mooshammer, Oksana Rasskazova and Susanne Fuchs   | Breathing affects reaction time in simple and delayed naming tasks                                     |
| 14        | 233         | Didier Demolin   | Speech embodiment and non-pulmonic consonants  |
| 15        | 235         | Annalisa Paroni, Nathalie Henrich Bernardoni, Christophe Savariaux,<br>Pierre Baraduc, Pascale Calabrèse and Hélène Lœvenbruck | Beatboxing, is it talking?   |
| 16        | 237         | Pertti Palo  | Can we detect initiation of tongue internal changes before overt movement onset in ultrasound?         |

Session 8 Speech Articulation: Thursday 12/17 8:45-9:45, 12:30-13:30 EST (UTC-5)

| Session<br># | Paper<br>ID | Authors   | Title   |
|--------------|-------------|---|---|
| 1            | 3           | (Withdrawn)   |   |
| 2            | 31          | Tsukasa Yoshinaga, Kazunori Nozaki and Akiyoshi lida  | Relationships between turbulent flow configuration and sound source location of Japanese sibilant fricatives                                  |
| 3            | 33          | Philip Hoole, Stefano Coretta, Christopher Carignan, Esther Kunay, Arun Joseph, Dirk Voit and Jens Frahm  | Control of larynx height in vowel production revisited: A real-time MRI study   |
| 4            | 35          | Andrea Deme, Márton Bartók, Tamás Gábor Csapó, Tekla Etelka Gráczi<br>and Alexandra Markó                 | Acoustic and articulatory vowel variation as quality shift and increased variance in anticipatory and carryover vowel-to-vowel coarticulation |
| 5            | 48          | Ivy Hauser  | Vowel coarticulation with alveopalatal sibilants in Mandarin  |
| 6            | 52          | Anne Hermes, Reinhold Greisbach and Ioana Chitoran  | Probing the limits of coordination: Word onset clusters in Georgian   |
| 7            | 66          | Louise Ratko, Michael Proctor and Felicity Cox  | Asymmetries in the kinematics of Australian English vowel gestures  |
| 8            | 79          | Sarah Harper  | Variability of articulatory dimensions relates to their role in distinguishing phonological categories for individual speakers                |
| 9            | 98          | Kevin Roon, Philip Hoole, Chakir Zeroual, Shihao Du and Adamantios<br>Gafos                               | Stiffness and articulatory overlap in Moroccan Arabic consonant clusters  |
| 10           | 100         | Bowei Shao and Rachid Ridouane  | Apical vowels' are not vowels: acoustic and ultrasound evidence from Jixi-Hui Chinese   |
| 11           | 112         | (Withdrawn)   |   |
| 12           | 119         | Rion Iwasaki, Kevin D. Roon, Jason A. Shaw and D. H. Whalen   | Lingual articulatory evidence of Japanese devoiced vowels: /u/ still there?   |
| 13           | 135         | Miran Oh, Dani Byrd, Louis Goldstein and Shrikanth S. Narayanan   | Velum-oral timing and its variability in Korean nasal consonants  |
| 14           | 139         | Conceição Cunha, Samuel Silva, António Teixeira, Nuno Almeida, Jens<br>Frahm and Arun Joseph              | First Results of an RT-MRI study on the influence of context in the synchronization of European Portuguese nasal vowels                       |
| 15           | 156         | Maida Percival, Tamás Gábor Csapó, Márton Bartók, Andrea Deme, Tekla<br>Etelka Gráczi and Alexandra Markó | Tongue root and voicing in Hungarian singleton and geminate obstruents  |
| 16           | 172         | Didier Demolin, Sergio Hassid and Shi Yu  | Effects of glottal impedance on subglottal pressure: evidence from voiceless aspirated, non-aspirated and ejectives stops                     |
| 17           | 181         | Christine H Shadle, Weirong Chen, Laura Koenig and Jonathan L Preston                                     | Acoustic variability of fricatives in normal adults   |
| 18           | 206         | Fabian Tomaschek  | Positional variability of articulatory gestures: Effects of practice and linguistic proficiency   |
| 19           | 209         | Donna Erickson, Jihyeon Yun, Jiayin Gao and Kerrie Obert  | Interaction between phonation mode and pharyngeal narrowing: A pilot EGG study  |
| 20           | 211         | Shuwen Chen, D.H. Whalen and Peggy Pik Ki Mok   | Articulatory and acoustic features of Mandarin rhotics: an ultrasound study   |
| 21           | 212         | Tekla Etelka Gráczi, Tamás Gábor Csapó, Andrea Deme, Kornélia Juhász<br>and Alexandra Markó               | Tongue root position in VC sequences with regard to the phonetic realisation of obstruent voicing: A preliminary study on Hungarian           |
| 22           | 240         | Caroline Crouch, Argyro Katsika and Ioana Chitoran  | Sonority, order, and overlap in Georgian syllable onsets  |
| 23           | 53          | Anne Hermes, Sam Tilsen and Rachid Ridouane   | Cross-linguistic timing contrast in geminates: A rate-independent perspective   |

Session 9 L2 Speech: Friday 12/18 7:30-8:30, 11:15-12:15 EST (UTC-5)

| Session # | Paper<br>ID | Authors   | Title   |
|-----------|-------------|---|---|
| 1         | 4           | Claire Honda, Annie Gilbert, Natalie Phillips and Shari Baum                              | Electrophysiological correlates of lexical stress perception in bilinguals  |
| 2         | 22          | Martijn Bartelds, Caitlin Richter, Mark Liberman and Martijn Wieling                      | Measuring foreign accent strength using an acoustic distance measure  |
| 3         | 43          | Antoine Serrurier and Christiane Neuschaefer-Rube   | Towards articulatory comparison between French and German from MRI data   |
| 4         | 45          | (Moved to Session 5 Methods)  |   |
| 5         | 50          | Boram Kim   | Acoustic and articulatory Correlates of lexical-stress in Mandarin accented<br>English  |
| 6         | 53          | (Moved to Session 8 Speech Articulation)  |   |
| 7         | 57          | Hung-Shao Cheng, Matthew Masapollo, Christina Hagedorn and Adam<br>Buchwald               | Gestural coordination in non-native onset clusters: An electromagnetic articulography study   |
| 8         | 61          | Lisanne de Jong and Martijn Wieling   | Using ultrasound tongue imaging to improve L2 English pronunciation in Dutch students   |
| 9         | 74          | Yung-Hsiang Shawn Chang   | An articulatory investigation of Mandarin speakers' production of English / r/  |
| 10        | 89          | Alexandra Markó, Márton Bartók, Tamás Gábor Csapó, Tekla Etelka<br>Gráczi and Andrea Deme | Subsegmental differences between accented and unaccented vowels in Hungarian?   |
| 11        | 127         | Sarah Bakst and Caroline Niziolek   | Error detection and correction in L1 and L2   |
| 12        | 152         | Laura Spinu, Jiwon Hwang and Nadya Pincus   | Phonetic and Phonological Learning in Monolinguals and Bilinguals   |
| 13        | 177         | Crystal Gilbert, Beckie Dugaillard, Marianna Krivoshaev and Laura Spinu                   | Differences in Articulatory Skill Between Monolinguals and Multilinguals of Different Backgrounds: An Acoustic Study of Tongue Twisters |
| 14        | 178         | Natalie Mosseri, Hadassa Dorville and Jenny Santiago                                      | Teaching the expression of emotion in English to native speakers of tone languages: a gamified approach                                 |
| 15        | 179         | Feng-Fan Hsieh and Yueh-Chin Chang  | Beyond Simplex and Complex: Gestural coordination in L2 English   |
| 16        | 198         | Anna Maria La Franceschina  | The role of segmental and suprasegmental information in the perception of foreign-accented English by native and non-native speakers    |
| 17        | 199         | Rawan Hanini, Mariagrazia Sciannantena, Michelle Ciccone and Laura<br>Spinu               | A Comparison of Geminate Attrition in the Speech of Arabic and Italian Immigrants Living in the United States                           |
| 18        | 204         | Sadao Hiroya and Takemi Mochida   | Formant-altered auditory feedback on non-native vowel production  |

Session 10 Interaction Effects / Phonetic Convergence: Friday 12/18 8:45-9:45, 12:30-13:30 EST (UTC-5)

| Session # | Paper<br>ID | Authors  | Title  |
|-----------|-------------|--|--|
| 1         | 5           | Martijn Wieling, Mark Tiede, Teja Rebernik, Lisanne de Jong, Anouck<br>Braggaar, Martijn Bartelds, Masha Medvedeva, Penny Heisterkamp, Tom<br>Freire Offrede, Hedwig Sekeres, Anna Pot, Mara van der Ploeg, Karin<br>Volkers and Gregory Mills | A novel paradigm to investigate phonetic convergence in interaction  |
| 2         | 7           | Kimberly Dahl and Cara Stepp   | Relative fundamental frequency under increased cognitive load in healthy speakers  |
| 3         | 18          | Rintaro Ogane, Jean-Luc Schwartz and Takayuki Ito  | Orofacial somatosensory inputs enhance speech intelligibility in noisy environments  |
| 4         | 37          | Hong Zhang   | Effect of alcohol intoxication on the production of (dis)fluent repetitions  |
| 5         | 39          | Ching Chu Sun and Peter Hendrix  | N-gram frequency effects on speech production in German and Mandarin Chinese   |
| 6         | 55          | Laura Smorenburg and Willemijn Heeren  | The effect of phonetic context on speaker information in nasal consonants  |
| 7         | 64          | Yamei Wang and Harim Kwon  | Do nonwords induce convergence?  |
| 8         | 72          | Benjamin Parrell and Caroline Niziolek   | Increased vowel contrast induced by adaptation to a non-uniform auditory perturbation in speech  |
| 9         | 84          | Matthias K. Franken, Robert J. Hartsuiker, Petter Johansson, Lars Hall and Andreas Lind  | Sense of agency is flexible during speech production   |
| 10        | 118         | Yadong Liu, Terrina Chan, Gracellia Purnomo and Bryan Gick   | Talking while smiling: Suppression in an embodied model of coarticulation  |
| 11        | 124         | Reed Blaylock  | Time to target attainment in singing and speech  |
| 12        | 131         | Elise LeBovidge, Churan Li and Ludo Max  | Toward understanding the limiting factors in speech auditory-motor adaptation: a new look at perceptual targets  |
| 13        | 134         | Monique Tardif, Jennifer Pardo and Tim Bressmann   | Phonetic Accommodation to Hypernasal Speech  |
| 14        | 141         | Jeffrey E. Kallay, Ulrich Mayr and Melissa A. Redford  | The Role of Narrative Coherence on Speech Motor Planning   |
| 15        | 145         | Chelsea Sanker   | Vowel Systems in Convergence   |
| 16        | 197         | Sireemas Maspong and Francesco Burroni   | Functional Load modulates speech production, but not speech perception: Evidence from Thai vowel length  |
| 17        | 200         | Harim Kwon   | Do changes in shadowing predict those in subsequent productions?   |
| 18        | 216         | Motoki Saito, Fabian Tomaschek and Harald Baayen   | An ultrasound study of frequency and coarticulation  |
| 19        | 217         | Motoki Saito, Fabian Tomaschek and Harald Baayen   | Semantic measures determining coarticulatory movements of the tongue tip   |
| 20        | 219         | Sejin Oh, Jason Shaw, Alexei Kochetov and Karthik Durvasula  | Russian palatalization as incomplete neutralization  |
| 21        | 221         | Anna Gutnyk, Oliver Niebuhr and Wentao Gu  | The Role of Audience Gender in Giving Product Presentations  |
| 22        | 224         | Aleksandra Cwiek and Susanne Fuchs   | Hand-mouth coordination in a pointing task requiring manual precision  |
| 23        | 228         | Hélène Serré, Amélie Rochet-Capellan, Marion Dohen and Susanne<br>Fuchs  | Speaking while moving: Does the head compensate for the hands not being able to move?  |
| 24        | 238         | Vivian Guo Li, Sejin Oh, Garima Chopra, Joshua Celli and Jason A. Shaw   | Articulatory correlates of morpheme boundaries: preliminary evidence from intra- and inter-gestural timing in the articulation of the English past tense |
| 25        | 241         | Heather Weston, Susanne Fuchs and Amélie Rochet-Capellan   | Speech during light physical activity: Effect on F0 and intensity  |