

## Detailed program

**Monday 18/05: all sessions to be held in the “Paraninfo” room (floor level 0)**

**8:20 Registration**

**9:20 Opening ceremony (Paraninfo)**

*Gonzalo León Serrano, Vice-Rector for Research, UPM*

*Phillipe Dejonckere, COST2103 President,*

*Yannis Stylianou, COST2103 Vice-President*

*Pedro Gómez-Vilda, AVFA2009 Co-Chair*

*Juan I. Godíno Llorente, AVFA2009 Co-Chair*

**9:40 Keynote speaker: P. H. Dejonckere.**

- **Objectivity and subjectivity in the evaluation of the speech**

**10:40 Coffee break**

**11:00 Session 1: Biomechanical modeling & simulation**

- **S1.P1. Estimation of the origin of a speaker's and singer's formant cluster**  
*A.M. Laukkanen, V. Radolf, J. Horáček, T. Leino*

- **S1.P2. Analysis of human vocal tract for ordinary and singing voice by FE modeling**  
*T. Vampola, J. Horáček*

- **S1.P3. Pressure profiles in glottis during phonation**  
*P. Šidlof, J. Horáček*

- **S1.P4. Numerical simulation of videokymographic images**  
*J. Horáček, J.G. Švec, P. Šidlof*

- **S1.P5. FE model of flow induced vocal folds oscillations in interaction with acoustic spaces of the vocal tract**  
*P. Švancara, V. Hruza, J. Horáček*

- **S1.P6. Membranous versus cartilaginous glottal adduction in four singing voice qualities: pilot laryngostroboscopic and videokymographic observations**  
*J. G. Švec, C. T. Herbst, S. Ternström*

**13:00 Lunch**

**13:40 Session 2: Voice Analysis**

- **S2.P1. Analysis of human voice signals via the first harmonic**  
*A. Alpan, J. Schoentgen, Y. Maryn, F. Grenez, P. Murphy*

- **S2.P2. Preliminary evaluation of speech sample salience analysis for speech cycle detection**  
*C. Mertens, F. Grenez, J. Schoentgen*

- **S2.P3. Jitter and shimmer modeling based on a time-varying sinusoidal model of speech**  
*Y. Pantazis, M. Vasilakis, Y. Stylianou*
- **S2.P4. Spectral jitter estimation revisited**  
*M. Vasilakis, Y. Stylianou*
- **S2.P5. Novel short-time jitter features for monitoring of running speech**  
*M. Vasilakis, Y. Stylianou*

**15:00 Coffee break**

**15:20 Session 3: Applications of Voice Analysis**

- **S3.P1. Corpora for assessment of cognitive function in older persons**  
*S. D'Arcy, N. Penard, S. Counihan, V. Rapcan, I. Robertson, R. Reilly*
- **S3.P2. Speech fundamental frequency in the cochlear implant-like spectrally reduced speech: a quantitative study**  
*C.T. Do, D. Pastor, A. Goalic*
- **S3.P3. Automatic detection of snore episodes from full night sound recordings: home and clinical application**  
*M. Calisti, L. Bocchi, C. Manfredi, I. Romagnoli, F. Gigliotti, G. Donzelli*
- **S4.P4. A contact-less portable device for voice quality monitoring**  
*C. Manfredi, T. Bruschi, A. Ferri, L. Bocchi, M. Calisti, G. Cantarella*
- **S5.P5. Apnoea voice characterization through vowel sounds analysis using generative Gaussian mixture models**  
*J.L. Blanco, R. Fernandez, D. Díaz, L.A. Hernández, E. López, D. Torre-Toledano*

**17:00 Social event 1: Visit and dinner in Segovia**

**Tuesday 19/05: all sessions to be held in the “Paraninfo” room (floor level 0)**

**8:20 Registration**

**9:00 Keynote speaker: O. Fujimura**

- **Voice Quality and Temporal Variability**

**10:00 Coffee break**

**10:20 Session 4: Esophageal and synthetic voices**

- **S4.P1. Natural voice synthesis: the potential relevance of high-frequency components**  
*D.M. Howard, S. Ternström, M. Speed*
- **S4.P2. Evaluation of a synthesizer of disordered voices**  
*S. Fraj, F. Grenez, J. Schoentgen*
- **S4.P3. Vowel recognition system based on acoustical and visual parameters applied to patients after laryngectomy**  
*R. Pietruch, W. Konopka, A. Grzanka*
- **S4.P4. Acoustic evaluation and speaker-subjective perception of tracheoesophageal voicing**  
*I. Jacobi, A.H. Ackerstaff, M.A. van Rossum, F.J.M. Hilgers*

**11:40 Session 5: Discrimination of pathological & dysphonic voices I**

- **S5.P1. Discrimination between normal and pathological voices by using correlations between acoustic descriptors**  
*T. Dubuisson, T. Dutoit, B. Gosselin, M. Remacle*
- **S5.P2. Exploiting image, voice, and patient's questionnaire for screening laryngeal disorders**  
*A. Verikas, V. Uloza, A. Gelzinis, M. Bacauskiene, R. Pribuisiene, M. Kaseta*
- **S5.P3. Evaluation and assessment of speech intelligibility on pathologic voices based upon acoustic speaker models**  
*T. Bocklet, T. Haderlein, F. Hönig, F. Rosanowski, E. Nöth*
- **S5.P4. Short time analysis of pathological voices using complexity measures**  
*J.D. Arias-Londoño, J.I Godino-Llorente, G. Castellanos-Domínguez*

**13:00 Lunch****13:40 Session 6: Physiology and effect of health on voice**

- **S6.P1. The physiology and acoustics of vocal fatigue I: new findings of criterion-based signs for the prevention of acquired voice disorders**  
*V.J. Boucher, A.C. Gilbert*
- **S6.P2. The physiology and acoustics of vocal fatigue II: what software designers need to know about signs of potential vocal-fold lesions**  
*V.J. Boucher, A.C. Gilbert*
- **S6.P3. Neural network feature analysis to assess hypernasality in patients treated for oral or oropharyngeal cancer**  
*M. de Bruijn, L. ten Bosch, D. Kuik, H. Quené, J.A. Langendijk, C.R. Leemans, I.M. Verdonck-de Leeuw*
- **S6.P4. Prospective screening for speech and swallowing problems in head and neck cancer patients via a touch screen computer system.**  
*I.M. Verdonck-de Leeuw, R. de Bree, I. Cnossen, A.L. Keizer, A. Houffelaar, R.N. Rinkel, C.R. Leemans*

**15:00 Coffee break**

**15:20 Session 7: Posters**

- **S7.P1. Glottis segmentation with a high-speed glottography : a fully automatic method**  
*J. Demeyer, T. Dubuisson, B. Gosselin, M. Remacle*
- **S7.P2. On the usefulness of linear and non linear filtering for esophageal speech prediction**  
*S. Ben Jebara*
- **S7.P3. Acoustic-to-articulatory mapping of tongue position for voiced speech signals**  
*F. A. Sepulveda, J. D. Arias, C.G. Castellanos*
- **S7.P4. Voice quality and the teaching of english as a foreign language: a pilot study**  
*M. Coadou Toscano, N. Audibert*
- **S7.P5. Acoustic-phonetic decoding for assessment of mispronunciations in speakers with cognitive disorders**  
*O. Saz, E. Lleida, W.. Rodríguez*
- **S7.P6. Comparison of maximum phonation time (MPT) between young and menopausal women**  
*J. Mendes Laureano, R.A. Ferriani, M.F. Silva de Sá*
- **S7.P7. Influence of sex hormones on the vocal tessitura of young and menopausal women**  
*J. Mendes Laureano, R.A. Ferriani, M.F. Silva de Sá*
- **S7.P8. An insight on the required quality of voice recordings for their automatic processing in clinical diagnosis applications**  
*R. Fraile, J.I. Godino-Llorente, N. Sáenz-Lechón, V. Osma-Ruiz, J.M. Gutiérrez*
- **S7.P9. The Effects of age on voice based on the analysis of the glottal source profile**  
*R. Fernández-Baillo, P. Gómez Vilda, J.I. Godino-Llorente*

**16:00 Social event 2: Visit and dinner in Toledo**

**Wednesday 20/05: all sessions to be held in the “Paraninfo” room (floor level 0)**

**8:40 Session 8: Discrimination of pathological & dysphonic voices II**

- **S8.P1. On improvement of discriminative HMM training for pathological voice classification**  
*M.O. Sarria-Paja., J.D. Arias-Londoño, J I. Godino Llorente, G. Castellanos-Dominguez*
- **S8.P2. Are the unvoiced consonants relevant for dysphonia phenomenon observation?**  
*G. Pouchoulin, C. Fredouille, J.F. Bonastre, A. Ghio, A. Marques, A. Giovanni*
- **S8.P3. Voice pathology detection and classification based on modulation spectra**  
*M. Markaki, Y. Stylianou*
- **S8.P4. Time-frequency representation of pathologic signals based on a quasi harmonic model of speech**  
*Y. Pantazis, O. Rosec, Y. Stylianou*
- **S8.P5. Evaluating the Grade of Voice Pathology from the Glottal-Source**  
*P. Gómez-Vilda, R. Fernández-Baillo, V. Rodellar-Biarge, J.I. Godino-Llorente*

**10:20 Coffee break****10:40 Session 9: Medical intervention and evaluation of treatments**

- **S9.P1. Multidimensional evaluation of voice therapy results in laryngeal hemiplegia**  
*G. Cantarella, S. Viglione, A. Minetti, C. Manfredi*

- **S9.P2. Perceptual and acoustic assessment of adductor spasmodic dysphonia pre- and posttreatment with botulinum toxin**  
*P.H. Dejonckere, K.J. Neumann, M.B.J. Moerman, J.P. Martens*
- **S9.P3. Spasmodic dysphonia before and after a botulinum toxin therapy**  
*K. Neumann, C. Kell, P. Dejonckere*

**11:40 Keynote speaker: P. Velasco**

- **The ICT Program in the EU 7th Framework Program**

**12:40 Closing ceremony**

