

## NATO ADVANCED STUDY INSTITUTE (ASI)

*The Fundamentals of Verbal and Non-verbal Communication and the Biometrical Issue  
2-12 September 2006 Vietri sul Mare, Italy*

### PROGRAMME, TIMETABLE AND ORGANIZATION



**1st day (September 3 2006)**

**morning**

**8:30-9:30 REGISTRATION**

**9:30 - 10:30 Welcome by the local and NATO authorities**

**Prof. Ragnhild Sohlberg**, NATO Science Program, HSD Panel;

**Prof. Giovanna Nigro**, Director of the Department of Psychology, Second University of Naples;

**Prof. Alida Labella**, Dean of the Faculty of Psychology, Second University of Naples;

**Prof. Nicola Melone**, Dean of the Faculty of Science, Second University of Naples;

**Prof. Nando Mancini**, Director of the Department of Physics, Salerno University;

**Prof. Luigi Maria Ricciardi**, Chairman of the Graduate Program on Computational and Information Science, University of Naples Federico II;

**Prof. Gaetano Scarpetta**, Department of Physics, Salerno University.

**10:30 - 11:00 Coffee break:**

**11:00 - 12:30 Prof. David McNeill:** The growth point and the challenge it poses to modeling.

**12:30 - 15:00 Lunch Break**

**afternoon**

**15:00 - 16:30: Prof. David Mc Neill:** Dialogue and conversation management.

**16:30 - 17:00 Coffee break**

**17:00 - 18:30: Prof. Maja Bratanić:** Nonverbal communication as a factor of linguistic and cultural miscommunication



**2nd day (September 4 2006)**

**morning**

**9:00 - 10:30 Prof. David Mc Neill:** Gesture and culture (the Kendon spinoff)

**10:30 - 11:00 Coffee break:**

**11:00 - 12:30 Prof. Eric Keller:** Individual speech rhythm variation within the plosive structure of speech I

**12:30-14:30 Lunch Break**

**afternoon**

**14:30 - 15:30 Prof. David House:** Analyzing and modelling verbal and non-verbal communication for talking animated interface agents I

**15:30 - 16:00 - Prof. Stefanie Shattuck-Hufnagel**

**16:00 - 16:30 Coffee break**

**16:30 - 17:30 Prof. Eric Keller:** Individual speech rhythm variation within the plosive structure of speech II

**17:30 - 18:15 Contributors Short presentations**

**17:30 - 17:45 Ke Li, Yoko Greenberg and Yoshinori Sagisaka:** On the analysis of fundamental frequency control characteristics of nonverbal utterances and its application to communicative prosody generation

**17:45 - 18:00 Anton Nijholt, Dennis Reidsma, and others:** Non-verbal Interaction and Ambient Entertainment

**18:00 - 18:15 Ioana Vasilianescu:** On the analysis of disfluencies in large spontaneous speech corpora: the case of autonomous fillers



**3rd day (September 5 2006)**

**morning**

**9:00-10:30 Prof. David House:** Analyzing and modelling verbal and non-verbal communication for talking animated interface agents II

**10:30 - 11:00 Coffee break**

**11:00 - 12:30 Prof. Dominic Massaro:** A Methodological and Theoretical Framework for the Study of Psychological and Biometrical Characteristics in Verbal and Nonverbal Communication I

**12:30 - 14:30 Lunch Break**

**afternoon**

14:30 - 16:00 Prof. Marcos Faundez-Zanuy Face recognition: an introductory overview  
 16:00-16:30 Coffee break  
 16:30 - 18:00 Prof. Dominic Massaro A Methodological and Theoretical Framework for the Study of Psychological and Biometrical Characteristics in Verbal and Nonverbal Communication II  
 18:00 - 18:30 Contributors Short presentation  
 18:00 - 18:15 Prof. Carl Vogel: Experiments in Assessing the Validity and Reliability of Item N-gram Distributions in Texts as Proxy for Textual Fingerprints  
 18:15 - 18:30 Prof. Aly N. El-Bahrawy A Systemic Approach to Enhance Writing, Analysis, and Presentation Skills



**4th day (September 6 2006)**

*morning*

9:00 - 10:30: Prof. Anna Esposito The amount of information on emotional states conveyed by the verbal and non verbal channels  
 10:30 - 11:00 Coffee break  
 11:00 - 12:30: Dr. Giovanni Tummarello, Dr. Stefano Squartini, Prof. Francesco Piazza: Standards and tools for Multimedia Metadata: MPEG-7, Semantic Web and a use case involving DSP preprocessing  
 12:30 - 14:30 Lunch break

*afternoon*

14:30 - 16:00 Prof. Ruth Bahr: Age as a Disguise in a Voice Identification Task  
 16:00 - 16:30; Coffee break  
 16:30 - 17:00 Contributors Short presentation  
 16:30-16:45: Prof. Katerina Pastra: Towards an all-inclusive cross-media relations framework  
 16:45-17:00: Prof. Leticia Vicente-Rasoamalala: Videocaptured Verbal and Nonverbal Foreign Language Teacher Feedback  
 17:00 - 18:30: POSTER SESSION I

Bernardis Paolo: Can Word prime gestures?  
 Cecchi Stefania, Moretti Emanuele: Overcomplete Blind Separation of Speech Sources in the Post Non Linear case through Extended Gaussianization  
 Daboveanu Diana-Cristina, Nicolae Carmen-Eufrosina: The study of similarities in learning foreign languages  
 Dalla Volta Riccardo: Tongue motor cortex excitability is modulated by the observation of the type of grasp action  
 Esposito Daniela: The relationship between gestures and prosody: A preliminary investigation on Italian  
 Grassi Marco: Face Recognition Experiment Using AR Database



**5th day (September 7 2006)**

*all day Excursion and banquet*



**6th day (September 8 2006)**

*morning*

9:00 - 10:30 Prof. Neda Pintaric: Transformation of nonverbal signs into verbal ones in Polish and Croatian I  
 10:30 - 11:00 Coffee break  
 11:00 - 12:30 Prof. Nickolaus Borbakis: Detection of Faces and Recognition of Facial Expressions  
 12:30 - 14:30 Lunch Break

*afternoon*

14:30 - 16:00 Dr. Elina Savino: Intonation, Accent and Personal Traits  
 16:00 - 16:30 Coffee break  
 16:30 - 17:30 Prof. Neda Pintaric: Transformation of nonverbal signs into verbal ones in Polish and Croatian II  
 17:30 - 18:30 Prof. Nikolaus Bourbakis, Praveen Kakumanu: Image Chromatic Adaptation for Face Skin Color Detection



**7th day (September 9 2006)**

*morning*

9:00 - 10:30 Prof. Nick Campbell: Speech Synthesis and Discourse Information  
 10:30 - 11:00 Coffee break  
 11:00 - 12:30 Prof. Adam Kendon: Talks on gesture I;  
 12:30 - 14:30 Lunch Break

*afternoon*

14:30 - 15:30 Prof. Adam Kendon: Talks on gesture II;  
 15:30 - 16:00 Coffee break  
 16:00 - 17:00 Prof. Nick Campbell: Towards Recognising Speech Gestures in Discourse

**17:00 - 18:30 POSTER SESSION II**

Karjalainen Sari: Verbal and nonverbal resources in constructing the topical flow in early interaction in picture book environment.  
 Luengo Iker: Effectiveness of Short-Term Prosodic Features for Speaker Verification  
 Scivetti Laura: Measuring gestural and prosodic parameters to model communicative behaviours perceived as different

**Terenzi Michela:** Visual Search, Baggage Screening, and the Assessment of Mental Workload Through the Analysis of Eye-Movements

**Vlach Jan and Přinosil Jiří:** Using the Wavelet Transform in Real-time Digital Signal Processing

**Udovyk Oksana:** The socio-cultural differences and the personal traits in Ukraine's scientific life



**8th day (September 10 2006)**

**morning**

9:00 10:30 Prof. Catherine Pelachaud: Multimodal expressive ECAs I

10:30 - 11:00 **Coffee break**

11:00 - 12:30 Prof. Paola Campadelli: Face recognition from 2D still images

12:30 - 14:30 **Lunch Break**

**afternoon**

14:30 - 16:00 **afternoon Panel Discussion:** Personal traits, voice prosody, emotional states features and their exploitation for technological applications;

16:00 - 16:30 **Coffee break**

16:30 - 18:30 **Contributors short presentations**

16:30 - 16:45: **Dr. Bui Huu Trung:** A Partially Observable Markov Decision Process approach to Affective Dialogue Modeling

16:45 - 17:00: **Dr. Vanhala Toni:** Recognizing the effects of voluntary facial activations using heart rate patterns

17:00 - 17:15: **Prof. Vicsi Klára:** Prosodic Cues for Automatic Phrase Boundary Detection in ASR

17:15 - 17:30: **Dr. Lazic Nikolaj:** Research on Speech Synthesis and Speech Recognition of Croatian language on the Faculty of Humanities and Social Sciences

17:30 - 17:45: **Dr. Simeon Ivana:** Machine Translation Evaluation: a Case study of Croatian-English and Russian-English MT Systems

17:45 - 18:00: **Dr. Samokhval Vladimir:** Face recognition using sparse meshes: a promising approach



**9th day (September 11 2006)**

**morning**

9:00 10:30 Prof. Gerard Bailly: Virtual talking heads and ambient face-to-face communication I

10:30 - 11:00 **Coffee break**

11:00 - 12:30 Prof. Catherine Pelachaud: Multimodal expressive ECAs II

12:30 - 14:30 **Lunch Break**

**afternoon**

14:30 - 16:00 Prof. Gerard Bailly: Virtual talking heads and ambient face-to-face communication II

16:00 - 16:30 **Coffee break**

16:30 - 18:00 Dr. Guido Aversano: Audio-Visual Forgery in Identity Verification



**10th day (September 12 2006)**

**morning**

9:00 - 9:15: **Prof. Volpe Rosa:** Images-Signes and Cognitive Scenes to Anchor Comprehension in Language Learning: An Experiment on the Relationship between Verbal and Non Verbal Communication through Italian Film

9:15 - 9:30: **Dr. Korzyk Krzysztof:** The Integrative and Structuring Function of Speech in Face-to-Face Communication from the Perspective of Human-Centered Linguistics

9:30 - 9:45: **Dr. Stejskal Vojtech:** Empty pauses detection in a noisy speech conditions

9:45 - 10:00: **Dr Jakov Pavlek:**

10:00 - 10:15: **Dr Mantovani Fabrizia:** Intercultural Differences in Vocal Communication of Emotions: An Experimental Comparison Between Chinese and Italian Young Adults

10:15 - 10:30: **Dr. Rossini Nicla:** "Unseen gestures" and the Mind of the Speaker: An analysis of co-verbal gestures in map-task activities

10:30 - 11:00 **Coffee break**

11:00: - 12:00 **Conclusions**

**Afternoon Departure**