



**MAVEBA**  
**2019**  
Firenze, Italy

## **FOREWORD**

This book of Proceedings includes the contributions presented at the 11<sup>th</sup> International Workshop on Models and Analysis of Vocal Emissions for Biomedical Applications – MAVEBA 2019, held in Firenze from 17 to 19 December, 2019. That is, 20 years since the very first MAVEBA in 1999!

Looking back to those days, I remember well the spirit of adventure that inspired this initiative, both on my side and on that of my colleague Piero Bruscazioni, with whom I also shared many subsequent MAVEBA editions.

MAVEBA started because of our curiosity and continued thanks to the enthusiasm of the participants. And today? Curiosity and enthusiasm are still there, with the awareness of a fascinating and increasingly interdisciplinary world. The large number of contributions collected in this Proceedings is the clear demonstration of this.

The main subjects concern methods for analyzing hoarseness and retrieving features of the human voice related to particular physiological or neurological conditions, with the aim of assessing reliable procedures for objective, quantitative definition of levels of voice disorders, singing voice parameters, newborn cry features, vocal fold and vocal tract modelling. The interdisciplinarity, that has always characterized the MAVEBA workshops, is well highlighted by the themes addressed, listed below.

I wish to give special thanks and greetings to the CoMeT Association, that is present at MAVEBA with a large number of its members. This year is a special one for CoMeT, celebrating the 50th anniversary from its foundation, and I am happy and proud to celebrate it together with the twenty-year anniversary of MAVEBA!

The papers presented at MAVEBA and collected in this volume are divided into nine Sessions, two Special Sessions, professionally coordinated by Dr. Franco Fussi and Dr. Philippe Dejonckere, and a Keynote lecture given by Thanasis Tsanas.

SESSION I – PARKINSON’S DISEASE AND SPEECH

SESSION II – SINGING VOICE

SESSION III - SPECIAL SESSION – EDUCATION AND REHABILITATION OF THE ARTISTIC VOICE

Coordinator: Franco Fussi

SESSION IV - VOICE AND EMOTIONS

SESSION V - VOICE QUALITY

SESSION VI - VOCAL FOLDS DYNAMICS

SESSION VII - COMET SESSION – ACTOR’S AND ACTRESS’ VOICES

Coordinator: Philippe Dejonckere

SESSION VIII – VOCAL FOLDS PARALYSIS/ABNORMALITIES

SESSION IX - KEYNOTE LECTURE

DEVELOPING NEW SPEECH SIGNAL PROCESSING ALGORITHMS FOR BIOMEDICAL AND LIFE SCIENCES APPLICATIONS: PRINCIPLES, FINDINGS, CHALLENGES, AND A VIEW TO THE FUTURE

Thanasis Tsanas

SESSION X - BIOMECHANICS/DEVICES

SESSION XI – SPEECH

SESSION XII - VOICE VS OTHER PHYSIOLOGICAL SIGNALS/DISEASES

I am very grateful to the authors for their contribution and to all participants that stimulated the discussion and helped to propose new research themes and methodologies of analysis in a field that will always be evolving, even and hopefully in the next twenty years.

*Claudia Manfredi*

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