

Dr. Nathalie HENRICH

Born the 22nd of June 1974 at Strasbourg (France)
French nationality, married, two children



Qualifications: Normalienne (ENS Cachan, Physics Dpt., 1994-98), Agrégée de Physique (high-level teaching degree, 1997), MSc in Fundamental Physics (ENS Cachan and Université d'Orsay, 1998), Ph.D. in Musical Acoustics (Université Paris 6, 2001).

Current Position: researcher at the French National Center for Scientific Research (CNRS), Department *Humanities and Social Sciences*, section *Language Sciences*

Affiliation: Speech and Cognition Department (ex ICP), GIPSA-lab (Grenoble Image Parole Signal Automatique), Grenoble, France

Core Competencies and Research Interests: Physics and physiology of human voice production, signal processing of human voice signal, acoustical and clinical phonetics, singing voice.

Significant Research Achievements: over 40 scientific publications in refereed journals, book chapters and conference proceedings; Co-direction of three PhD students; 2 PhD student graduated to date (Maëva Garnier, June 2007, Lucie Bailly, June 2009).

Five Recent Publications:

1. Bailly L., Pelorson X., **Henrich N.**, Ruty N. (2008) Influence of a constriction in the near field of the vocal folds: Physical modeling and experimental validation, *J. Acoust. Soc. Amer.*, Vol. 124 (5), pp. 3296-3308.
2. **Henrich N.**, Bezard P., Expert R., Garnier M., Guerin C., Pillot C., Quattrocchi S., Roubeau B., Terk B. (2008) Towards a Common Terminology to Describe Voice Quality in Western Lyrical Singing: Contribution of a Multidisciplinary Research Group, *Journal of Interdisciplinary Music Studies*, spring/fall 2008, vol. 2, issue 1&2, pp. 71-93
3. Roubeau B., **Henrich N.**, Castellengo M. (2008) Laryngeal vibratory mechanisms: the notion of vocal register revisited, *Journal of Voice*, 09 June 2008 (10.1016/j.jvoice.2007.10.014)
4. **Henrich N.**, Kiek M., Smith J. and Wolfe J. (2007) *Resonance strategies used in Bulgarian women's singing style: a pilot study*. *Logopedics Phoniatrics Vocology*, vol. 32:4, 171 - 177.
5. **Henrich N.** (2006) *Mirroring the voice from Garcia to the present day: Some insights into singing voice registers*, *Logopedics Phoniatrics Vocology*, vol. 31, p. 3-14.
6. **Henrich N.**, d'Alessandro C., Castellengo M. and Doval B. (2005) *Glottal open quotient in singing: Measurements and correlation with laryngeal mechanisms, vocal intensity, and fundamental frequency*, *J. Acoust. Soc. Amer.*, Vol. 117 (3), pp. 1417-1430.
7. **Henrich N.**, d'Alessandro C., Castellengo M. and Doval B. (2004) *On the use of the derivative of electroglottographic signals for characterization of nonpathological phonation*, *J. Acoust. Soc. Amer.*, Vol. 115 (3), pp. 1321-1332.
8. **Henrich N.**, Sundin G., Ambroise D., d'Alessandro C., Castellengo M. and Doval B. (2003) *Just noticeable differences of open quotient and asymmetry coefficient in singing voice*, *Journal of Voice*, vol. 17 (4), pp. 481-494.

Memberships:

French Acoustical Society (SFA), European Acoustical Society (EAA), French Society of Phoniatriy (SFP&Co), French Ethnomusicology Society (SFE), French Association of Spoken Communication (AFCP), Collegium Medicorum Theatri (CoMET).

Scientific board :

Substitute delegate in the Management Committee of European action COST 2103 *Advanced Voice Function Assessment*; treasurer of the Musical Acoustics Group of SFA; member of organizing committee of ICVPB (*International Conference on Voice Physiology and Biomechanics*)

Peer Reviewer:

Associate Editor for Logopedics Phoniatrics Vocology.

Reviewer for Journal of the Acoustical Society of America; Acta Acustica united with Acustica; IEEE Trans. Acoustic, Speech, and Signal Processing; Speech Communication; Journal of Speech, Language, and Hearing Research; Journal of Voice; *EURASIP* Journal on Advances in Signal Processing, Human Frontier Science Program Journal, Journal of Interdisciplinary Music Studies.