

Prof. Dr. ir. Emanuël Anco Peter Habets

PERSONAL DETAILS

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PROFESSIONAL EXPERIENCE

- Nov. 2010 – present **Friedrich-Alexander University Erlangen-Nuremberg, Germany**
International Audio Laboratories Erlangen
Associate Professor
- Nov. 2010 – present **Fraunhofer IIS, Germany**
Audio and Multimedia Department
Chief Scientist Spatial Audio Processing
- Feb. 2010 – Oct. 2010 **Imperial College London, UK**
Dept. of Electrical and Electronic Engineering
Research Fellow (Marie Curie Award)
- Feb. 2009 - Jan. 2010 **Imperial College London, UK**
Dept. of Electrical and Electronic Engineering
Research Associate (Dr Patrick A. Naylor)
- Mar. 2007 - Jan. 2009 **Bar-Ilan University, Ramat-Gan, Israel**
School of Engineering
Postdoctoral Fellow (prof. Sharon Gannot)
- Mar. 2007 - Jan. 2009 **Technion - Israel Institute of Technology, Haifa, Israel**
Dept. of Electrical Engineering
Postdoctoral Fellow (prof. Israel Cohen)
- Jul. 2007 (1 week) **Imperial College London, UK**
Dept. of Electrical and Electronic Engineering
Visiting Researcher (Dr Patrick A. Naylor)
- Feb. 2006 (1 month) **Bar-Ilan University, Ramat-Gan, Israel**
School of Engineering
Visiting Researcher (prof. Sharon Gannot)
- Sept. 2002 - Dec. 2006 **Technische Universiteit Eindhoven, The Netherlands**
Dept. of Electrical Engineering
Research Assistant (prof. dr. ir. J.W.M. Bergmans)

DEGREES

- June 2007 **Ph.D.** in Electrical Engineering
Technische Universiteit Eindhoven, The Netherlands
'Single- and Multi-Microphone Speech Dereverberation using Spectral Enhancement'
- August 2002 **M.Sc.** in Electrical Engineering
Technische Universiteit Eindhoven, The Netherlands
'A Study towards Acoustic Source Localization and Tracking'
- July 1999 **B.Sc.** in Electrical Engineering
Hogeschool Limburg (Institute of Technology), The Netherlands

RESEARCH INTERESTS

Perception and parametric-based spatial audio signal processing

Single and multi-microphone statistical signal processing

Signal processing for speech and audio applications

Microphone array processing for dereverberation, noise reduction, echo cancellation and sound localization of stationary and moving sources

Statistical room acoustics

Acoustic vector-sensor array processing

TRAINING

- | | |
|-------------|---|
| 2009 - 2010 | Personal and professional development workshops at Imperial College London. |
| 2002 - 2003 | DISC 2002 - System Identification for Control Systems. |
| 2003 | 'European Summer School on ICA – from theory to applications' in Berlin, Germany. |
| 2002 | Tutor training at the Technische Universiteit Eindhoven. |
| 1996 | Licensed radio amateur (self-tuition). |

TUTORIALS

1. P.A. Naylor, **E.A.P. Habets**, C. Evers, 'Speech Dereverberation', *European Signal Processing Conference (EUSIPCO)*, Aalborg, Denmark, Aug. 2010.

INVITED LECTURES

1. 'Generating Virtual Microphone Signals Using Distributed Microphone Arrays', NTT, Japan, Apr. 2, 2012.
2. 'Generating Virtual Microphone Signals Using Distributed Microphone Arrays', Politecnico di Milano, Italy, Mar. 16, 2012.
3. 'Geometry-based Sound Acquisition', Imperial College London, UK, Dec. 8, 2011.
4. 'Advances in Speech Dereverberation Using Spectral Enhancement', Fraunhofer IIS, Germany, Feb. 10, 2010.
5. 'Advances in Speech Dereverberation Using Spectral Enhancement: Adding Value to Hearing-aids?', University of Oldenburg, Germany, Jan. 5, 2010.
6. 'Recent Advances in Single- and Multi-Microphone Speech Dereverberation', University of Erlangen-Nuremberg, Germany, Jul. 29, 2009.
7. 'Recent Advances in Single- and Multi-Microphone Speech Dereverberation', Microsoft Research, Redmond, USA, Oct. 23, 2008.
8. 'Recent Advances in Speech Dereverberation', IBM Speech Technology Seminar, Haifa, Israel, Jul. 2, 2008.
9. 'Suppression of Reverberation in Hearing-Aids Using Spectral Enhancement', GN-ReSound, The Netherlands, Feb. 6, 2007.
10. 'Single and Multi-Microphone Speech Dereverberation Using Spectral Enhancement', Technion, Israel, Oct. 30, 2006.
11. 'Speech Dereverberation', SISTA Seminar, K.U.Leuven, Belgium, Jan. 11, 2005.

RESEARCH GRANTS, SCHOLARSHIPS AND FELLOWSHIPS

1. 'Spotforming - Speech and Audio Capture in Adverse Environments', Marie Curie Actions - Intra-European Fellowship for career development (FP7-PEOPLE-IEF-2008), 150k GBP, 2010-2011.
2. 'Acoustic Array Signal Processing in Adverse Environments', from the state-of-Israel Higher-Education Council post-doctoral grant, 30k ISL, 2007-2008.

ACADEMIC FUNCTIONS

Member of the admission committee, 'Communication and Multimedia Engineering', 2012 – present

Member and vice-chairman of the study board, 'Communication and Multimedia Engineering', 2011 – present

Member of the study board, 'Elektrotechnik-Elektronik-Informationstechnik', 2010 – present

MEMBERSHIPS / OFFICE IN PROFESSIONAL SOCIETIES

Audio Engineering Society, Member

IEEE, Senior Member

IEEE Signal Processing Society, Member

IEEE Signal Processing Society, Member of Audio and Acoustic Signal Processing Technical Committee, (2011-2013)

CONFERENCE ORGANIZATION

General co-chair, IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA), New Paltz, New York, 2013

Organization Committee, International Workshop on Acoustic Echo and Noise Control (IWAENC), 2005

Technical Program Committee, European Signal Processing Conference, 2009 – 2012

TECHNICAL REVIEWER

Dutch Technology Foundation STW, International Workshop on Acoustic Echo and Noise Control, European Signal Processing Conference, International Conference on Latent Variable Analysis and Signal Separation, IEEE International Conference on Acoustic, Speech and Signal Processing, IEEE Workshop on Applications of Signal Processing to Audio and Acoustics, IEEE Asilomar Conference on Signals, Systems, and Computers, IEEE Hands-free Speech Communication and Microphone Arrays, EURASIP Journal on Applied Signal Processing, IEEE Transactions on Signal Processing, IEEE Transactions on Audio, Speech and Language Processing, IEEE Transactions on Neural Networks.

TEACHING EXPERIENCE

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|----------------|--|
| 2011 - present | Lecture 'Speech Enhancement' at the University of Erlangen-Nuremberg (2.5 ECTS). |
| 2011 - present | Seminar 'Selected Topics in Spatial Audio Signal Processing' at the University of Erlangen-Nuremberg (2.5 ECTS). |
| 2009 - 2010 | Lecturing part of the 'Speech Processing' course at Imperial College London, UK. |
| 2002 - 2005 | Supervising student projects in the area of digital signal processing at the Technische Universiteit Eindhoven, The Netherlands. |

RESEARCH STUDENTS

- | | |
|----------------|---|
| 2012 - present | Student: M.Sc. student
Location: Friedrich-Alexander University Erlangen-Nuremberg, Germany
Project: 'Direction of arrival estimation in highly reverberant environments' |
| 2012 - present | Student: M.Sc. student
Location: Friedrich-Alexander University Erlangen-Nuremberg, Germany
Project: 'Geometry-based sound extraction' |
| 2012 - present | Student: B.Sc. student
Location: Friedrich-Alexander University Erlangen-Nuremberg, Germany
Project: 'Frequency dependent propagation models and its application to geometry-based audio signal processing' |
| 2011 - present | Student: Ph.D. student
Location: Friedrich-Alexander University Erlangen-Nuremberg, Germany
Project: 'Parametric-based spatial audio signal processing' |

2011 - present	Student: M.Sc. student Location: Friedrich-Alexander University Erlangen-Nuremberg, Germany Project: 'Multi-microphone speech presence probability estimation'
2010 (6 months)	Student: Visiting Ph.D. student from Università Politecnica delle Marche Location: Imperial College London, UK Project: 'Subband blind SIMO system identification'
2009 - present	Student: Ph.D. student (principal supervisor dr. P.A. Naylor) Location: Imperial College London, UK Project: 'Spherical microphone array processing'
2009 - present	Student: Ph.D. student (principal supervisor: prof. S. Gannot) Location: Bar-Ilan University, Israel Project: 'On the use of acoustic vector-sensors in reverberant sound fields'
2009 - 2010	Student: Ph.D. student (principal supervisor dr. P.A. Naylor) Location: Imperial College London, UK Project: 'Sparse adaptive filtering with applications to acoustic echo cancellation and blind system identification'
2009 - 2010	Student: Ph.D. student (principal supervisor dr. P.A. Naylor) Location: Imperial College London, UK Project: 'Channel-based inference of room geometries'
2008 - 2010	Student: M.Sc. student (principal supervisor: prof. S. Gannot) Location: Bar-Ilan University, Israel Project: 'Generalized framework for acoustic source localization in reverberant environments using particle filtering'
2009 - 2010	Student: Ph.D. student (principal supervisor dr. P.A. Naylor) Location: Imperial College London, UK Project: 'Robust acoustic system equalization'
2004 - 2005	Student: M.Sc. student (sole supervisor) Location: Technische Universiteit Eindhoven, The Netherlands Project: 'Single-Channel Speech Dereverberation'
2004 - 2004	Student: B.Sc. student (sole supervisor) Location: Technische Universiteit Eindhoven, The Netherlands Project: 'A MLS-based multi-channel room impulse response estimation tool for MATLAB'

PUBLICATIONS

REFEREED JOURNAL PAPERS

1. D. Levin, **E.A.P. Habets** and S. Gannot, 'Maximum likelihood estimation of direction of arrival using an acoustic vector-sensor', *Journal of the Acoustical Society of America*, to appear.
2. **E.A.P. Habets** and J. Benesty, 'A perspective on frequency-domain beamformers in room acoustics', *IEEE Transactions on Audio, Speech, and Language Processing*, Vol. 20, Issue 3, pp. 947-960, Mar. 2012.
3. **E.A.P. Habets**, J. Benesty and P.A. Naylor, 'Speech distortion and interference rejection constraint beamformer', *IEEE Transactions on Audio, Speech, and Language Processing* Vol. 20, Issue 3, pp. 854-867, Mar. 2012.
4. Levy, S. Gannot and **E.A.P. Habets**, 'Multiple-hypothesis extended particle filter for acoustic source localization in reverberant environments', to appear in the *IEEE Transactions on Audio, Speech, and Language Processing*, Vol. 19, Issue 6, pp. 1540-1555, Aug. 2011.
5. D. Levin, **E.A.P. Habets**, S. Gannot, 'On the angular error of intensity vector based direction of arrival estimation in reverberant sound fields', *Journal of the Acoustical Society of America*, Vol. 128, Issue 4, pp. 1800-1811, Oct. 2010.
6. P.A. Naylor, N.D. Gaubitch and **E.A.P. Habets**, 'Signal-based performance evaluation of dereverberation algorithms', *Journal of Electrical and Computer Engineering (formerly Hindawi Research Letters in Signal Processing)*, Vol. 2010, Article ID 127513, pp. 1-5, 2010.
7. **E.A.P. Habets**, J. Benesty, I. Cohen, S. Gannot and J. Dmochowski, 'New insights into the MVDR beamformer in room acoustics', *IEEE Transactions on Audio, Speech, and Language Processing*, Vol. 18, Issue 1, pp. 158-170, Jan. 2010. (SCI: 1.782)

8. **E.A.P. Habets**, I. Cohen and S. Gannot, 'Late reverberant spectral variance estimation based on a statistical model', *IEEE Signal Processing Letters*, Vol. 16, No. 9, pp. 770-773, Sep. 2009. (SCI: 1.537)
9. **E.A.P. Habets**, I. Cohen and S. Gannot, 'Generating non-stationary multi-sensor signals under a spatial coherence constraint', *Journal of the Acoustical Society of America*, Vol. 124, Issue 5, pp. 2911-2917, Nov. 2008. (SCI: 1.860)
10. **E.A.P. Habets**, S. Gannot, I. Cohen and P.C.W. Sommen, 'Joint dereverberation and residual echo suppression of speech signals in noisy environments', *IEEE Transactions on Audio, Speech, and Language Processing*, Vol. 16, Issue 8, pp. 1433-1451, Nov. 2008. (SCI: 1.782)
11. **E.A.P. Habets** and S. Gannot, 'Generating sensor signals in isotropic noise fields', *Journal of the Acoustical Society of America*, Vol. 122, Issue 6, pp. 3464-3470, Dec. 2007. (SCI: 1.860)

BOOKS

1. J. Benesty, J. Chen and **E.A.P. Habets**, 'Speech Enhancement in the STFT Domain', SpringerBriefs in Electrical and Computer Engineering, Springer-Verlag, ISBN 978-3-642-23249-7, Sept. 2011.
2. **E.A.P. Habets**, 'Single- and Multi Microphone Speech Dereverberation using Spectral Enhancement', *Ph.D. Thesis*, Technische Universiteit Eindhoven, Jun. 25, 2007.

BOOK CHAPTERS

1. **E.A.P. Habets**, 'Speech dereverberation using spectral enhancement', in *Speech Dereverberation*, P.A. Naylor and N.D. Gaubitch (Eds.), Springer, 2010.
2. P.A. Naylor, **E.A.P. Habets**, J.Y.C. Wen and N.D. Gaubitch, 'Models, measurement and evaluation', in *Speech Dereverberation*, P.A. Naylor and N.D. Gaubitch (Eds.), Springer, 2010.
3. **E.A.P. Habets**, J. Benesty, S. Gannot and I. Cohen, 'The MVDR beamformer for speech enhancement', in *Speech Processing in Modern Communication: Challenges and Perspectives*, I. Cohen, J. Benesty and S. Gannot (Eds.), Springer, 2010.
4. **E.A.P. Habets**, S. Gannot and I. Cohen, 'Dereverberation and residual echo suppression in noisy environments', in *Topics in Speech and Audio Processing in Adverse Environments*, E. Hänsler and G. Schmidt (Eds.), Springer, 2008.

REFEREED CONFERENCE PAPERS

1. **E.A.P. Habets**, J. Benesty and J. Chen, 'Multi-microphone noise reduction using interchannel and interframe correlations', to appear in the *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2012)*, Kyoto, Japan, Mar. 25-30, 2012.
2. O. Thiergart, G. Del Galdo and **E.A.P. Habets**, 'Signal-to-reverberant ratio estimation based on the complex spatial coherence between omnidirectional microphones', to appear in the *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2012)*, Kyoto, Japan, Mar. 25-30, 2012.
3. Y. Lacouture-Parodi, **E.A.P. Habets**, J. Benesty, 'Multichannel noise reduction Wiener filter in the Karhunen-Loève expansion domain', to appear in the *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2012)*, Kyoto, Japan, Mar. 25-30, 2012.
4. R. Maas, **E.A.P. Habets**, A. Sehr, W. Kellermann, 'On the application of reverberation suppression to robust speech recognition', to appear in the *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2012)*, Kyoto, Japan, Mar. 25-30, 2012.
5. M. Thomas, N. Gaubitch, **E.A.P. Habets**, P.A. Naylor, 'An insight into common filtering in noisy SIMO blind system identification', to appear in the *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2012)*, Kyoto, Japan, Mar. 25-30, 2012.
6. A. Silzle, S. George, **E.A.P. Habets**, T. Bachmann, 'Investigation on the quality of 3D sound reproduction', *Proc. of the International Conference on Spatial Audio*, Detmold, Germany, 2011.
7. P. Annibale, F. Antonacci, P. Bestagini, A. Brutti, A. Canclini, L. Cristoforetti, **E.A.P. Habets**, J. Filos, W. Kellermann, K. Kowalczyk, A. Lombard, E. Mabande, D. Markovic, P.A. Naylor, M. Omologo, R. Rabenstein, A. Sarti, P. Svaizer, M.R.P. Thomas, 'The SCENIC Project: Space-Time Audio Processing for Environment-Aware Acoustic Sensing and Rendering', *Proc. of the Audio Engineering Society (AES) 131st Convention*, New York, USA, Oct. 20-23, 2011.
8. O. Thiergart, G. Del Galdo and **E.A.P. Habets**, 'Diffuseness estimation with high temporal resolution via spatial coherence between virtual first-order microphones', *Proc. of the IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA 2011)*, New York, USA, Oct. 16-19, 2011.

9. **E.A.P. Habets**, J. Benesty and P. Naylor, 'A cross-relation based affine projection algorithm for blind SIMO system identification', *Proc. of the 19th European Signal Processing Conference (EUSIPCO 2011)*, Barcelona, Spain, August 29 - September 2, 2011.
10. **E.A.P. Habets** and J. Benesty, 'Coherent and incoherent interference reduction using a subband tradeoff beamformer', *Proc. of the 19th European Signal Processing Conference (EUSIPCO 2011)*, Barcelona, Spain, August 29 - September 2, 2011.
11. **E.A.P. Habets** and J. Benesty, 'Joint dereverberation and noise reduction using a two-stage beamforming approach', *Proc. of the Joint Workshop on Hands-free Speech Communication and Microphone Arrays (HSCMA 2011)*, Edinburgh, Scotland, May 30 - June 1, 2011.
12. D. Jarrett, **E.A.P. Habets**, M.R.P. Thomas, N.D. Gaubitch and P.A. Naylor, 'Dereverberation performance of rigid and open spherical microphone arrays: Theory & simulation', *Proc. of the Joint Workshop on Hands-free Speech Communication and Microphone Arrays (HSCMA 2011)*, Edinburgh, Scotland, May 30 - June 1, 2011.
13. G. Del Gado, O. Thiergart, T. Weller and **E.A.P. Habets**, 'Generating virtual microphone signals using geometrical information gathered by distributed arrays', *Proc. of the Joint Workshop on Hands-free Speech Communication and Microphone Arrays (HSCMA 2011)*, Edinburgh, Scotland, May 30 - June 1, 2011.
14. D. Jarrett, **E.A.P. Habets**, M.R.P. Thomas and P.A. Naylor, 'Simulating room impulse responses for spherical microphone arrays', *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2011)*, Prague, Czech Republic, May 22-27, 2011.
15. P. Loganathan, **E.A.P. Habets** and P.A. Naylor, 'A proportionate adaptive algorithm with variable partitioned block length for acoustic echo cancellation', *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2011)*, Prague, Czech Republic, May 22-27, 2011.
16. D. Levin, **E.A.P. Habets** and S. Gannot, 'Direction-of-arrival estimation using acoustic vector sensors in the presence of noise', *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2011)*, Prague, Czech Republic, May 22-27, 2011.
17. P. Loganathan, **E.A.P. Habets** and P.A. Naylor, 'A partitioned block proportionate adaptive algorithm for acoustic echo cancellation', to appear in the *Proc. of the Asia-Pacific Signal and Information Processing Association (APSIPA) Annual Summit and Conference*, Biopolis, Singapore, Dec. 14 - 17, 2010.
18. D. Jarrett, **E.A.P. Habets** and P.A. Naylor, 'Eigenbeam-based acoustic source tracking in noisy reverberant environments', **invited paper**, *Proc. of the IEEE Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, California, USA, Nov. 7-10, 2010.
19. **E.A.P. Habets**, 'A distortionless subband beamformer for noise reduction in reverberant environments', in the *Proc. of the International Workshop on Acoustic Echo and Noise Control (IWAENC)*, Aug. 2010.
20. J. Filos, **E.A.P. Habets** and P.A. Naylor, 'A two-step approach to blindly infer room geometries', in the *Proc. of the International Workshop on Acoustic Echo and Noise Control (IWAENC)*, Aug. 2010.
21. D. Levin, **E.A.P. Habets** and S. Gannot, 'Impact of source signal coloration on intensity vector based DOA estimation', in the *Proc. of the International Workshop on Acoustic Echo and Noise Control (IWAENC)*, Aug. 2010.
22. W. Zhang, **E.A.P. Habets** and P.A. Naylor, 'On the use of channel shortening in multichannel acoustic system equalization', in the *Proc. of the International Workshop on Acoustic Echo and Noise Control (IWAENC)*, Aug. 2010.
23. A. Sehr, **E.A.P. Habets**, R. Maas and W. Kellermann, 'Towards a better understanding of the effect of reverberation on speech recognition performance', in the *Proc. of the International Workshop on Acoustic Echo and Noise Control (IWAENC)*, Aug. 2010.
24. B. Castro, N.D. Gaubitch, **E.A.P. Habets**, S. Gannot, P.A. Naylor and S. Grant, 'Subband scale factor ambiguity correction using multiple filterbanks', in the *Proc. of the International Workshop on Acoustic Echo and Noise Control (IWAENC)*, Aug. 2010.
25. M.R.P. Thomas, N.D. Gaubitch, **E.A.P. Habets** and P.A. Naylor, 'Supervised identification and removal of common filter components in adaptive blind SIMO system identification', in the *Proc. of the International Workshop on Acoustic Echo and Noise Control (IWAENC)*, Aug. 2010.
26. D. Jarrett, **E.A.P. Habets** and P.A. Naylor, '3D source localization in the spherical harmonic domain using a pseudointensity vector', in the *Proc. of the 18th European Signal Processing Conference (EUSIPCO 2010)*, Aalborg, Denmark, Aug. 23-27, 2010.

27. S. Goetze, E. Albertin, J. Rannies, **E.A.P. Habets** and Karl-Dirk Kammeyer, 'Speech quality assessment for listening-room compensation', *Proc. of the AES 38th international conference*, Piteå, Sweden, Jun. 13–15, 2010.
28. **E.A.P. Habets** and P.A. Naylor, 'An online quasi-Newton algorithm for blind SIMO identification', *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2010)*, Mar. 14-19, 2010.
29. W. Zhang, **E.A.P. Habets** and P.A. Naylor, 'A system-identification-error-robust method for equalization of multichannel acoustic systems', *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2010)*, Mar. 14-19, 2010.
30. P. Loganathan, **E.A.P. Habets** and P.A. Naylor, 'Performance analysis of IPNLMS for identification of time-varying systems', *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2010)*, Mar. 14-19, 2010.
31. **E.A.P. Habets**, J. Benesty, S. Gannot, P.A. Naylor and I. Cohen, 'On the application of the LCMV beamformer to speech enhancement', *Proc. of the IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA 2009)*, New York, USA, Oct. 18-21, 2009.
32. **E.A.P. Habets**, J. Benesty, I. Cohen and S. Gannot, 'On a tradeoff between dereverberation and noise reduction using the MVDR beamformer', **invited paper**, *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2009)*, Taiwan, Mar. 2009, pp. 3741-3744.
33. **E.A.P. Habets**, S. Gannot and I. Cohen, 'Speech dereverberation using backward estimation of the late reverberant spectral variance', *Proc. of the IEEE Convention of Electrical & Electronics Engineers in Israel (IEEEI)*, Dec. 2008.
34. **E.A.P. Habets**, 'Multi-microphone speech dereverberation using spectral enhancement and statistical reverberation models', **invited paper**, *Proc. of the IEEE Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, California, USA, Oct. 26-29, 2008.
35. **E.A.P. Habets**, S. Gannot and I. Cohen, 'Robust early echo cancellation and late echo suppression in the STFT domain', *Proc. of the 11th International Workshop of Acoustic Echo and Noise Control (IWAENC 2008)*, Seattle, Washington, USA, Sep. 14-17, 2008.
36. I. Ram, **E.A.P. Habets**, Y. Avargel and I. Cohen, 'Multi-microphone speech dereverberation using LIME and least squares filtering', *Proc. of the 16th European Signal Processing Conference (EUSIPCO 2008)*, Lausanne, Switzerland, Aug. 25-29, 2008.
37. N.D. Gaubitch, **E.A.P. Habets** and P.A. Naylor, 'Multi-microphone speech dereverberation using spatio-temporal and spectral processing', **invited paper**, *Proc. of the IEEE International Symposium on Circuits and Systems (ISCAS 2008)*, Seattle, USA, May 18-21, 2008.
38. A. Abramson, **E.A.P. Habets**, S. Gannot and I. Cohen, 'Dual-microphone speech dereverberation using GARCH modeling', *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2008)*, Las Vegas, USA, 2008.
39. J.Y.C. Wen, **E.A.P. Habets** and P.A. Naylor, 'Blind estimation of reverberation time based on the distribution of signal decay rates', *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2008)*, Las Vegas, USA, 2008.
40. **E.A.P. Habets**, N.D. Gaubitch and P.A. Naylor, 'Temporal selective dereverberation of noisy speech using one microphone', *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2008)*, Las Vegas, USA, 2008.
41. **E.A.P. Habets** and S. Gannot, 'Dual-microphone speech dereverberation using a reference signal', *Proc. of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2007)*, Honolulu, USA, Apr. 15-20, 2007, vol. IV, pp. 901–904.
42. **E.A.P. Habets**, S. Gannot and I. Cohen, 'Dual-microphone speech dereverberation in a noisy environment', *Proc. of the IEEE International Symposium on Signal Processing and Information Technology (ISSPIT 2006)*, Vancouver, Canada, Aug. 27-30, 2006, pp. 651-655.
43. J.Y.C. Wen, N.D. Gaubitch, **E.A.P. Habets**, T. Myatt and P.A. Naylor, 'Evaluation of speech dereverberation algorithms using the MARDY database', *Proc. of the 10th International Workshop of Acoustic Echo and Noise Control (IWAENC 2006)*, Paris, France, Sep. 12-14, 2006, pp. 1-4.
44. **E.A.P. Habets**, I. Cohen and S. Gannot, 'MMSE log-spectral amplitude estimator for multiple interferences', *Proc. of the 10th International Workshop of Acoustic Echo and Noise Control (IWAENC 2006)*, Paris, France, Sep. 12-14, 2006, pp. 1-4.

45. **E.A.P. Habets**, 'Experimental results of a multi-channel speech dereverberation algorithm based on a statistical model of late reverberation', *Proc. of the first annual IEEE BENELUX/DSP Valley Signal Processing Symposium (SPS-DARTS 2005)*, Antwerp, Belgium, Apr. 2005, pp. 11-14.
46. **E.A.P. Habets**, 'Multi-channel speech dereverberation based on a statistical model of late reverberation', *Proc. of the 30th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2005)*, Philadelphia, USA, Mar. 18-23, 2005, pp. 173-176.
47. **E.A.P. Habets**, 'Single-channel speech dereverberation based on spectral subtraction', *Proc. of the 15th Annual Workshop on Circuits, Systems and Signal Processing (ProRISC 2004)*, Veldhoven, Netherlands, Nov. 25-26, 2004, ISBN 90-73461-43-X; STW, Technology Foundation, Utrecht, pp. 250-254.
48. **E.A.P. Habets** and P.C.W. Sommen, 'Optimal microphone placement for source localization using time delay estimation', *Proc. of the 13th Annual Workshop on Circuits, Systems and Signal Processing (ProRISC 2002)*, Veldhoven, Netherlands, Nov. 28-29, 2002, ISBN 90-73461-33-2; STW, Technology Foundation, Utrecht, The Netherlands, pp. 284-287.
49. J. van de Laar, **E.A.P. Habets**, J.D.P.A. Peters, and P.A.M. Lokkart, 'Adaptive blind audio signal separation on a DSP', *Proc. of the 12th Annual Workshop on Circuits, Systems and Signal Processing (ProRISC 2001)*, Veldhoven, Netherlands, Nov. 28-30, 2001, ISBN 90-73461-29-4; STW, Technology Foundation, Utrecht, The Netherlands, pp. 475-479.

CONFERENCE ABSTRACTS

1. **E.A.P. Habets**, 'Speech dereverberation based on a statistical model of late reverberation using a linear microphone array', *Proc. of the Joint Workshop on Hands-Free Speech Communication and Microphone Arrays (HSCMA 2005)*, Piscataway NJ, USA, Mar. 17-18, 2005, pp. d7-d8.

OTHER

1. **E.A.P. Habets** and S. Gannot, Comments on 'Generating Sensor Signals in Isotropic Noise Fields', internal report, Sept. 2010.
2. **E.A.P. Habets**, 'Room impulse response generator', *Technical Report*, 2006, pp. 1-17.
3. **E.A.P. Habets**, 'A literature study on dereverberation in acoustic environments', *Internal Report*, 2003, pp. 1-50.
4. **E.A.P. Habets**, 'A study towards acoustic source localization and tracking', *M.Sc. Thesis*, Technische Universiteit Eindhoven, Aug. 27, 2002.

LANGUAGE SKILLS

Dutch (native), English (fluent), German (advanced), French (beginner), Hebrew (beginner)