

MASSIMO MISCHI

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PERSONAL DATA

Birth date: 8 September 1973.

Birth place: Rome (Italy).

Nationality: Italian.

SUMMARY

Faculty member focused on application oriented design. Specialist in biomedical signal processing. Extensive experience with ultrasound and magnetic resonance imaging, electrocardiography, electromyography, fiber-optical endoscopy,

WORK EXPERIENCE

- ❑ **Nov 2007 – present:** Assistant Professor at the Technische Universiteit Eindhoven, Electrical Engineering, Signal Processing Systems Group. Lecturer of the courses “Biomedical sensing technology” and “Regulation of the respiration”.
- ❑ **Jan 2005 - Oct 2007:** Researcher at the Technische Universiteit Eindhoven, Electrical Engineering, Signal Processing Systems Group. Leader and supervisor of several projects on contrast ultrasound, magnetic resonance, fetal electrocardiography, and other biomedical signal processing applications in collaboration with the Philips Research Labs and the Catharina Hospital in Eindhoven (NL), and the Máxima Medical Center in Veldhoven (NL). Lecturer of the 2nd year course “Regulation of the respiration”, Biomedical Technology Faculty of the Eindhoven University of Technology.
- ❑ **Mar 2000 - Sep 2004:** Research Assistant at the Technische Universiteit Eindhoven, Electrical Engineering, Signal Processing Systems Group.
- ❑ **Apr 1999 - Feb 2000:** Supervisor of graduating students, Biomedical Instrumentation Course, La Sapienza University of Rome.
- ❑ **1993 - 2000:** Vice President of the Marte Sport Association in Rome.

EDUCATION

- ❑ **Mar 2002 - Sep 2004:** Ph.D. study, Technische Universiteit Eindhoven (NL), Electrical Engineering, Signal Processing Systems. Ph.D. thesis successfully defended on Oct. 4, 2004. Thesis title: “Contrast Echocardiography for Cardiac Quantifications”.
- ❑ **15 May 2002:** Registered in the Italian Public Register of Engineers.
- ❑ **Mar 2000 - Mar 2002:** Post-Master in Technological Design, Information and Communication Technology, Stan Ackermans Institute of the Technische Universiteit Eindhoven (NL).
- ❑ **1992 - 1999:** M.Sc. in Electrical Engineering, La Sapienza University of Rome.
- ❑ **1986 - 1991:** Maturità Classica (Classical school leaving certificate).

SPOKEN LANGUAGES

Italian mother tongue, fluent English and Dutch.

COMPUTER PROGRAMING LANGUAGES

Labview, ImaqVision, Matlab, C, C++, Mathematica, Turbo Pascal, IDASS (microprocessor design tool), Latex, Assembler.

INTERNATIONAL SCIENTIFIC ACTIVITIES

- Chairman at the 4th IEEE-EMBS Benelux-Chapter Annual Meeting in 2009 (Nov. 9-10, Enschede).
- Co-chairman at the International IEEE EMBC in 2009 (Sep. 2-6, Minneapolis).
- Reviewer for the IEEE Transactions on Ultrasound, Ferroelectric, and Frequency Control (UFFC), on Medical Image Processing, and on Engineering in Medicine and Biology. Reviewer for the International Journal of Cardiology, Biomedical Signal Processing & Control, Medicine & Science in Sports & Exercise, and the EURASIP Journal on Applied Signal Processing.
- Project reviewer for the Portuguese Foundation for Science and Technology (FCT).
- Project reviewer for the United States-Israel Binational Science Foundation (BSF).
- Reviewer since 2005 for the International Conference on Image Processing (ICIP) sponsored by the IEEE Signal Processing Systems Society.
- Reviewer since 2008 for the Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS).
- Member of the organizing committee of the “Kick-off meeting” of the IEEE Benelux Chapter on Biomedical Engineering on Nov. 14, 2005 at the Eindhoven University of Technology.
- Board member (secretary since 2008) of the IEEE Benelux Chapter on Biomedical Engineering.
- Committee member of the Design, Automation, & Test in Europe (DATE) conference in 2007 and 2008.
- Organizing committee member of the first IEEE EMBS Benelux Symposium, Brussels, 7-8 December, 2006.

AWARDS

- NWO/STW VIDI Grant for the project proposal Prostate cancer detection by contrast ultrasound diffusion imaging (P-CUDI) in 2009.
- Martin Black Prize for the best journal paper published in Physiological Measurements in 2007.
- Valorization Grant by the Dutch Foundation for Technology (STW) for the project proposal “Development and prototyping of a novel device for optimized mechanical stimulation and training of skeletal muscles”, Dec. 2005.
- Best poster at the Ninth European Symposium on Ultrasound Contrast Imaging, Rotterdam (NL), 2004.
- Best poster at the 18th Annual Advances in Contrast Ultrasound, Chicago (IL), 2003.

SCIENTIFIC CONTRIBUTIONS

Book Chapters

- M. Mischi, Z. Del Prete, and H.H.M. Korsten, "Indicator dilution techniques in cardiovascular quantification", Biomechanical Systems Technology - Cardiovascular Systems, Chapter 4, pp. 89-155, Singapore: World Scientific Publishing, first ed., 2007.
- M. Mischi and J.A. Blom, "Flow sensors for liquids", Biomedical sensors, Chapter 2, 85 pages, Momentum Press: Philadelphia, in press.

Refereed journals

- C. Rabotti, M. Mischi, S.G. Oei, J.W.M. Bergmans, "Noninvasive estimation of the electrohysterographic action-potential conduction velocity," IEEE Trans. on Biomedical Engineering, vol. 57, no. 9, pp. 2178-2187, 2010.
- M.P.G.C. Vinken, C. Rabotti, M. Mischi, J.O.E.H. van Laar and G.S. Oei, "Nifedipine-induced changes in the electrohysterogram of preterm contractions: feasibility in clinical practice," Obstetrics and Gynecology International, Special Issue on Human Birth and Parturition Clinical Management, in press.
- C. Rabotti, M. Mischi, L. Beulen, S.G. Oei, J.W.M. Bergmans, "Modeling and identification of the electrohysterographic volume conductor by high-density electrodes," IEEE Trans. on Biomedical Engineering, vol. 57, no. 3, pp. 519-527, 2010.
- C. Rabotti, M. Mischi, J. O. E. H. van Laar, G.S. Oei and J. W. M. Bergmans, "Inter-electrode delay estimators for electrohysterographic propagation analysis," Physiological Measurements, vol. 30, pp. 745-761, 2009.
- P.G.C. Vinken, C. Rabotti, M. Mischi, and S.G. Oei, "Accuracy of frequency-related parameters of the electrohysterogram for predicting preterm delivery: a review of the literature", Obstetrical and Gynecological Survey, vol. 64, no. 8, pp. 529-541, 2009.
- M. Mischi and M. Cardinale, "The effects of superimposing a 28-Hz force modulation on muscle activity," Medicine & Science in Sports & Exercise, vol. 41, pp. 645-652, 2009.
- M. Mischi, H.C.M. van den Bosch, J. A. den Boer, J. Verwoerd, R.J.E. Grouls, C.H. Peels, H.H.M. Korsten, "Intra-thoracic blood volume measurement by contrast magnetic resonance imaging," Magnetic Resonance in Medicine, vol. 61, pp. 344-353, 2009.
- R Vullings, C.H.L. Peters, R. Sluiter, M. Mischi, S.G. Oei, and J.W.M. Bergmans, "Dynamic segmentation and linear prediction for maternal ECG removal in antenatal abdominal recordings," Physiol. Meas., vol. 30, pp. 291-307, 2009.
- C. Rabotti, M. Mischi, J.O.E.H. van Laar, G.S. Oei, J.W.M. Bergmans, "Estimation of internal uterine pressure by joint amplitude and frequency analysis of electrohysterographic signals," Physiol. Meas., vol. 29, pp. 829-841, 2008.
- M. Mischi, H.C.M. van den Bosch, A.H.M. Jansen, M. Sieben, R.M. Aarts, and H.H.M. Korsten, "Quantification of regional left ventricular dyssynchrony by magnetic resonance imaging," IEEE Trans. on Biomedical Engineering, vol. 55, no. 3, pp. 985-995, 2008.
- M. Mischi, J.A. den Boer, H.H.M. Korsten, "On the physical and stochastic representation of an indicator dilution curve as a gamma variate," Physiological Measurements, vol. 29, pp. 281-294, 2008. **IOP** (Institute of Physics) **Select 2008**.
- Annemieke Jansen, Massimo Mischi, Frank Bracke, Jan Melle van Dantzig, Kathinka Peels, Norbert van Hemel, Hendrikus Korsten, "Novel Ultrasound-Contrast-Agent Dilution Method for Assessment of Ventricular Ejection Fraction," European Journal of Echocardiography, vol. 9, no. 4, pp. 489-493, 2008.
- M. Mischi, A.-D. van der Meer, A.H.M. Jansen, R.J.E. Grouls, and H.H.M. Korsten, "Cardiovascular quantification by ultrasound contrast agents," Abstract on Basic & Clinical Pharmacology & Toxicology, vol. 101, supp. 1, pp. 58-59, 2007.

- ❑ S.M.M. Martens, C. Rabotti, M. Mischi, R.J. Sluijter, “A robust fetal ECG detection method for abdominal recordings,” *Physiol. Meas.*, vol. 28, pp. 373-388, 2007. **Martin Black Prize for the best journal paper published in *Physiological Measurements* in 2007.**
- ❑ M. Mischi, A.H.M. Jansen, and H.H.M. Korsten, “Identification of cardiovascular dilution systems by contrast ultrasound,” *Ultrasound in Med. & Biol.*, vol. 33, no. 3, pp. 439-451, 2007.
- ❑ A.H.M. Jansen, M. Mischi, J.-M. van Dantzig, F. Bracke, K. Peels, N.M. van Hemel, and H.H.M. Korsten, “Novel Ultrasound-Contrast-Agent Dilution Method for Assessment of Left Ventricular Ejection Fraction,” *Circulation*, vol. 114, supp. 2, p. 479, 2006
- ❑ S.M.M. Martens, M. Mischi, S. G. Oei, and J.W.M. Bergmans, “An improved adaptive powerline interference canceller for electrocardiography,” *IEEE Transactions on Biomedical Engineering*, vol. 53, no. 11, pp. 2220-2231 2006.
- ❑ H.H.M. Korsten, M. Mischi, R.J.E. Grouls, A. Jansen, JM. van Dantzig, and K. Peels, “Quantification in Echocardiography,” *Seminars in Cardiothoracic and Vascular Anesthesia*, vol. 10, no. 1, pp. 57-62, 2006.
- ❑ M. Mischi, A.H.M. Jansen, A.A.C.M. Kalker, H.H.M. Korsten, “Identification of Ultrasound-Contrast-Agent Dilution Systems for Ejection Fraction Measurements,” *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, vol. 52, no. 3, pp. 410-420, 2005.
- ❑ M. Mischi, A.A.C.M. Kalker, H.H.M. Korsten, “Cardiac Image Segmentation for Contrast Agent Videodensitometry,” *IEEE Transactions on Biomedical Engineering*, vol. 52, no. 2, pp. 277-286, 2005.
- ❑ M. Mischi, A.A.C.M. Kalker, H.H.M. Korsten, “Contrast Echocardiography for Pulmonary Blood Volume Quantification,” *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, vol. 51, no. 9 , pp. 1137-1147, Sep. 2004.
- ❑ M. Mischi, A.H.M. Jansen, A.A.C.M. Kalker, H.H.M. Korsten, “A New Ultrasound Dilution Method for EF Quantification,” *Abstract on the Journal of the American Society of Echocardiography*, vol. 17, no. 5, p. 517, May 2004.
- ❑ M. Mischi, A.C.C.M. Kalker, H.H.M. Korsten, “Videodensitometric Methods for Cardiac Output measurements,” *Eurasip Journal on Applied Signal Processing*, vol. 2003, no. 5, pp. 479-489, 2003.

Invited lectures

- ❑ M. Mischi, “Neuromuscular effects of vibration exercise,” Philips Research, High Tech Campus Eindhoven, July 8, 2010.
- ❑ M. Mischi, M.P.J. Kuenen, H. Wijkstra, “Detection of cancer microvascularization by contrast-enhanced ultrasound,” 25th Annual Advances in Contrast Ultrasound – ICUS Symposium, Chicago (IL), Sep. 28-29, 2010.
- ❑ M. Mischi, “Cardiovascular quantification by contrast enhanced ultrasound and MRI,” invited presentation at the Medtronic Bakken Research Centrum, Maastricht, July 2, 2010.
- ❑ M. Mischi, “Microvascular quantification by contrast-ultrasound diffusion imaging,” 26th Annual Meeting of the European Society for Hyperthermic Oncology, Rotterdam, May 19-21, pp. 36-37, 2010.
- ❑ M.Mischi, “Contrast ultrasound angiogenesis imaging,” Seminar at the University of Florence, Florence (Italy), May 14, 2010.
- ❑ M. Mischi, M.P.J. Kuenen, H. Wijkstra, and H.H.M. Korsten, “Prostate cancer imaging,” 24th Annual Advances in Contrast Ultrasound – ICUS Symposium, Chicago (IL), Oct. 22-23, 2009.
- ❑ M. Mischi, “Quantitative contrast enhanced imaging,” invited seminar at the Electrical Engineering Faculty of the University of Illinois at Urbana Champaign, Oct. 21, 2009.
- ❑ M. Mischi, “Analysis of electrical activity and contraction in skeletal and smooth muscles,” Invited presentation at the Signal Processing Club of Philips Research, High Tech Campus Eindhoven, Sep. 10, 2009.

- ❑ M. Mischi, "Diagnostic possibilities by contrast echography and indicator dilution principles," Invited presentation at the docNtdag, Eindhoven, Mar. 11, 2009.
- ❑ E.K. Steinmeier and M. Mischi, "Prostate cancer detection by contrast ultrasound diffusion imaging," Invited presentation at the ModellenClub meeting, Academic Medical Center, Amsterdam (NL), June 12, 2008.
- ❑ H.H.M. Korsten, M. Mischi, and A. Jansen, "Perioperative TEE," Anesthesiologendagen 2008, MECC Maastricht (NL), May 22-23, 2008.
- ❑ M. Mischi and H.H.M. Korsten, "Cardiovascular quantification by contrast echocardiography and dilution principles," Invited presentation at the ModellenClub meeting, Academic Medical Center, Amsterdam (NL), April 2, 2008.
- ❑ M. Mischi, R. Hermans, J.M.G. Borsboom, M. Böhmer, R.M. Aarts, N. de Jong, H.H.M. Korsten, "Effects of nonlinear ultrasound propagation through varying contrast-agent concentrations" The 13th European Symposium on Ultrasound Contrast Imaging, Rotterdam (NL), pp. 80-82, Jan. 24-25, 2008.
- ❑ M. Mischi, "Contrast echocardiography and cardiovascular quantifications," Symposium PhD Defense A.H.M. Jansen, TU Eindhoven, Nov. 19, 2007.
- ❑ M. Mischi, B.P.G. Hermens, A.-D. van der Meer, R.J.E. Grouls, P. Rafter, M. Böhmer, and H.H.M. Korsten, "Acoustic quantification of ultrasound contrast agents for indicator dilution applications," 22nd Annual Advances in Contrast Ultrasound, Chicago (IL), Sep. 6-7, 2007.
- ❑ M. Mischi, "Prototyping of a force modulation training system," invited presentation at the Dept of Neurophysiology of the University Medical Center St. Radboud, Nijmegen, Mar. 6, 2007.
- ❑ M. Mischi, "Contrast ultrasonography and indicator dilution principles for cardiovascular diagnostic," NERG Themabijeenkomst: Healthcare, Philips High Tech Campus, Eindhoven, 21 Feb. 2007.
- ❑ M. Mischi, A.H.M. Jansen, H.H.M. Korsten, "Contrast Echocardiography for Cardiovascular Quantifications," 1st IEEE/EMBS Benelux Symposium, Brussels, 7-8 Dec., 2006, proc. on pp. 20-23.
- ❑ M. Mischi, "Developments in cardiovascular quantification by contrast ultrasound," SUGB meeting, Rotterdam, Nov. 29, 2006.
- ❑ M. Mischi, B.P.G. Hermens, A.-D. vd Meer, and H.H.M. Korsten, "Indicator dilution principles and contrast ultrasound for cardiovascular quantification," 21th Annual Advances in Contrast Ultrasound, Chicago (IL), Nov.8-11, 2006.
- ❑ M. Mischi, "Quantitative Cardiovascular Monitoring," Function Monitoring Course, Faculty of Physics, Eindhoven University of Technology, 23 Oct., 2006.
- ❑ M. Mischi, A.H.M. Jansen, H.H.M. Korsten, "Least mean squares methods for cardiovascular quantification by contrast echocardiography," Benelux IEEE SPS DARTS, Antwerpen (Belgium), Mar. 28-29, pp. 185-189, 2006.
- ❑ M. Mischi, "Contrast Ultrasonography for cardiovascular quantifications," Elektronica Colloquium, Philips Research Eindhoven (NL), Nov. 7, 2005.
- ❑ M. Mischi, A.H.M. Jansen, H.H.M. Korsten, "Improved Methods for Contrast Ultrasound Cardiovascular Quantifications," 20th Annual Advances in Contrast Ultrasound, Chicago (IL), Oct. 26-27, 2005.
- ❑ M. Mischi, S. M.M. Martens, I. Saadane, J. W.M. Bergman, "Care at distance: fetal monitoring," Wireless and Pervasive Computing Technologies for Healthcare and Disaster Recovery Workshop, National University of Singapore, 23 Mar. 2005.
- ❑ M. Mischi, "Microbubbles: beyond LV," 5th Christmas Echo: international course on perioperative echocardiography, Brussels (Belgium), Dec. 17-18, 2004.
- ❑ M. Mischi, "Ultrasound Contrast Agent Applications for Cardiovascular Quantifications," Invited presentation Dutch Society of Ultrasound, Pie Medical (Maastricht, NL), Nov. 24, 2004.
- ❑ M. Mischi, A.H.M. Jansen, A.A.C.M. Kalker, H.H.M. Korsten, "Contrast Echocardiography for Cardiac Quantifications," Invited presentation 19th Annual Advances in Contrast Ultrasound, Chicago (IL), Nov. 4-5, 2004.

- M. Mischi, A.H.M. Jansen, A.A.C.M. Kalker, H.H.M. Korsten, "Ultrasound-Contrast-Agent Dilution Systems and Cardiac Quantification," Poster presentation 19th Annual Advances in Contrast Ultrasound, Chicago (IL), Nov. 4-5, 2004.
- M. Mischi, A.H.M. Jansen, A.A.C.M. Kalker, H.H.M. Korsten, "Contrast Ultrasound Quantification of Ejection Fraction and Pulmonary Blood Volume," The Ninth European Symposium on Ultrasound Contrast Imaging, Rotterdam (NL), pp. 6-8, Jan. 22-23, 2004.
- M. Mischi, A.H.M. Jansen, A.A.C.M. Kalker, H.H.M. Korsten, "Sparkling waves and echocardiographic quantification," 18th Annual Advances in Contrast Ultrasound, Chicago (IL), Oct. 30-31, 2003.
- M. Mischi, A.A.C.M. Kalker, H.H.M. Korsten, "Bubbles and Indicator Dilution Principles in Echocardiography," 17th Annual Advances in Contrast Ultrasound, Chicago (IL), Oct. 31- Nov. 1, 2002.
- M. Mischi, "Indicator dilution principles in Echocardiography," RUSH University St. Luke's Medical Center, Anesthesiology Dept., Chicago (IL), Nov. 5, 2002.
- M. Mischi, H.H.C.M. Kalker, H.H.M. Korsten, "Videodensitometric Cardiac Output Measurements by dilution of Ultrasound Contrast Agents: Modeling and In-vitro Experimentation," Invited presentation Dutch Society Ultrasound, Leiden (NL), Apr. 2002.

International Conferences

- M.P.J. Kuenen, H. Wijkstra, M. Mischi, "Coherence-based contrast-ultrasound diffusion imaging for prostate cancer detection," IEEE UFFC Proc. on Annual International Conference on Ultrasonics, San Diego (CA), Oct. 11-14, 2010, 4 pages.
- M. Mischi, M.P.J. Kuenen, H. Wijkstra, "Novel method for prostate cancer detection by contrast-enhanced ultrasonography," 28th World Congress of Endourology and SWL, Chicago (IL), Sep. 1-4, 2010.
- M. Mischi, C. Rabotti, M. Cardinale, "Electromyographic assessment of muscle fatigue during isometric vibration training at varying frequencies," accepted for publication in the IEEE-EMBS Proc. on the 32nd Annual International Conference, Buenos Aires (Argentina), Sep. 1-4, 2010 pp. 2338-2341.
- C. Rabotti and M. Mischi, "Two-dimensional estimation of the electrohysterographic conduction velocity," accepted for publication in the IEEE-EMBS Proc. on the 32nd Annual International Conference, Buenos Aires (Argentina), Sep. 1-4, 2010, pp. 4262-4265.
- M. Mischi, C. Rabotti, M. Cardinale, "On the effects of vibration training on muscle fatigue," The 18th Congress of the International Society of Electrophysiology and Kinesiology (ISEK), June 17-19, Aalborg, 2010.
- M. Mischi, M.P.J. Kuenen, H. Wijkstra, "Imaging of angiogenesis by contrast-enhanced ultrasound," 25th Annual meeting of the Engineering and Urology Society, San Francisco (CA), May 29, 2010.
- C. Rabotti, M. Mischi, L. Beulen, S.G. Oei, and J.W.M. Bergmans, "Mathematical modeling of the electrohysterogram: understanding the origin of uterine contractions for preterm delivery prediction," 9th World Congress of Perinatal Medicine Berlin, October 24-28, 2009.
- M. Mischi, M.P.J. Kuenen, H. Wijkstra, A.J. Hendrikx, H.H.M. Korsten, "Prostate cancer localization by contrast-ultrasound diffusion imaging," IEEE UFFC Proc. on Annual International Conference on Ultrasonics, Rome, Sep. 21-23, 2009, pp. 283-286.
- C. Rabotti, M. Mischi, J. O. E. H. van Laar, S. G. Oei, and J. W. M Bergmans, "Myometrium electromechanical modeling for internal uterine pressure estimation by electrohysterography," IEEE-EMBS Proc. on the 31st Annual International Conference, Minneapolis, Sep. 2-7, 2009, pp. 6259-6262.
- R. M. H. Besseling, S. Zinger, H. Wijkstra, A. J. M. Hendrikx, P. A. J. Hilbers, M. Mischi, "Speckle-initialized dynamic segmentation of the prostate," IEEE-EMBS Proc. on the 31st Annual International Conference, Minneapolis, Sep. 2-7, 2009, pp. 6352-6355.
- M. Mischi, C. Rabotti, L.P.J. Vosters, S.G. Oei, and J.W.M. Bergmans, "Electrohysterographic conduction velocity estimation," IEEE-EMBS Proc. on the 31st Annual International Conference, Minneapolis, Sep. 2-7, 2009, pp. 6934-6939.

- ❑ M. Mischi, H.C.M. van den Bosch, J.A. den Boer, J. Verwoerd, R.J.E. Grouls, H.H.M. Korsten, "Hemodynamic Characterization of the Trans-Thoracic Circulation by Contrast-Enhanced Magnetic Resonance Imaging," Proceedings of the 17th Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Honolulu (Hawaii), April 20-24, 2009, p. 4715.
- ❑ C. Rabotti, M. Mischi, M. Gamba, M. Vinken, G. S. Oei, and J.W.M. Bergmans, "Identification of the electrohysterographic volume conductor by high-density electrodes", 4th European Congress for Medical and Biomedical Engineering, Antwerp, Belgium, 23-27 Nov. 2008, pp. 235-238.
- ❑ M. Mischi and M. Cardinale, "Muscle electrical activity during force modulation exercise," 4th European Congress for Medical and Biomedical Engineering, Antwerp, Belgium, 23-27 Nov. 2008, pp. 2065-2068.
- ❑ J.J.F.A.H. Grootens, M. Mischi, M.Böhmer, H.H.M. Korsten, R.M. Aarts, "Modeling of ultrasound propagation through contrast agents," 4th European Congress for Medical and Biomedical Engineering, Antwerp, Belgium, 23-27 Nov. 2008, pp. 440-443.
- ❑ R. Vullings, C.H.L. Peters, M. Mischi, S.G. Oei, and J.W.M. Bergmans, "Fetal movement quantification by fetal vectorcardiography: a preliminary study," IEEE-EMBS Proc. on the 30th Annual International Conference, Vancouver (Canada), Aug. 20-24, pp. 1056-1059, 2008.
- ❑ C. Rabotti, M. Mischi, J. van Laar, G. Oei, and J. Bergmans, "On the propagation analysis of electrohysterographic signals," IEEE-EMBS Proc. on the 30th Annual International Conference, Vancouver (Canada), Aug. 20-24, pp. 3868-3871, 2008.
- ❑ M. Mischi, "Increased co-activation of antagonist muscles by force modulation training," The 17th Congress of the International Society of Electrophysiology and Kinesiology (ISEK), June 18-21, Niagara Falls Canada, 2008.
- ❑ M. Mischi, H. C. van den Bosch, J. A. den Boer, J. Verwoerd, R. J. Grouls, C. H. Peels, and H. H. Korsten, "Intra-thoracic blood volume measurement by contrast magnetic resonance imaging," Proceedings of the 16th Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Toronto (Canada), May 3 - 9, p. 915, 2008.
- ❑ C. Rabotti, M. Mischi, J. van Laar, G. Oei, and J. Bergmans, "Non-invasive estimation of the uterine pressure by electrohysterography," 8th world conference of perinatal medicine, 9-13 September 2007, Florence, Italy.
- ❑ C.H.L. Peters, R. Vullings, A.M. Bolderdijk, M. Mischi, L. Gourmelon, B. Feddes, S.G. Oei, "Contactless measurement of the antepartum fetal ECG," 8th world conference of perinatal medicine, 9-13 September 2007, Florence, Italy.
- ❑ M. Mischi and I. Kaashoek, "Electromyographic hyperactivation of skeletal muscles by time-modulated mechanical stimulation," IEEE-EMBS Proc. on the 29th Annual International Conference, Lyon, Aug. 23 - 26, pp. 5373-5376, 2007.
- ❑ M. Mischi, H.C.M. van den Bosch, A.H.M. Jansen, R.M. Aarts, and H.H.M. Korsten, "Assessment of ventricular mechanical dyssynchrony by short-axis MRI," IEEE-EMBS Proc. on the 29th Annual International Conference, Lyon, Aug. 23 - 26, pp. 6011-614, 2007.
- ❑ C. Rabotti, M. Mischi, G.S. Oei, and J.W.M. Bergmans, "Electrohysterographic Analysis of Uterine Contraction Propagation with Labor Progression: A Preliminary Study," IEEE-EMBS Proc. on the 29th Annual International Conference, Lyon, Aug. 23 - 26, pp. 4135-4138, 2007.
- ❑ Rik Vullings, Chris Peters, Massimo Mischi, Rob Sluijter, Guid Oei, and Jan Bergmans, "Artifact reduction in maternal abdominal ECG recordings for fetal ECG estimation," IEEE-EMBS Proc. on the 29th Annual International Conference, Lyon, Aug. 23 - 26, pp. 43-46, 2007.
- ❑ M. Mischi, A.H.M. Jansen, and H.H.M. Korsten, "Novel Ultrasound-Contrast-Agent Dilution Method for Assessment of Left Ventricular Ejection Fraction," 21th Annual Advances in Contrast Ultrasound, Chicago (IL), Nov.8-11, 2006.
- ❑ M. Mischi and H.H.M. Korsten, "Transpulmonary dilution system identification for pulmonary blood volume measurements by contrast echocardiography" IEEE-EMBS Proc. on the 28th Annual International Conference, New York, 30 Aug. - 3 Sep., pp. 1818-1821, 2006.

- ❑ C. Rabotti, M. Mischi, J. O. E. H. van Laar, P. Aelen, S. G. Oei, and J. W. M. Bergmans, "Relationship between electrohysterogram and internal uterine pressure: a preliminary study," IEEE-EMBS Proc. on the 28th Annual International Conference, New York, 30 Aug. - 3 Sep., pp. 1661-1664, 2006.
- ❑ Rik Vullings, Chris Peters, Massimo Mischi, Guid Oei, and Jan Bergmans, "Maternal ECG removal from non-invasive fetal ECG recordings," IEEE-EMBS Proc. on the 28th Annual International Conference, New York, 30 Aug. - 3 Sep., pp. 1394-1397, 2006.
- ❑ M. Mischi, A.H.M. Jansen, H.H.M. Korsten, "Dilution System Identification Methods for Contrast Ultrasound Left-Ventricle Ejection Fraction Assessment," IEEE UFFC Proc. on Annual International Conference on Ultrasonics, Rotterdam, 18-21 Sep., pp. 862 - 865, 2005.
- ❑ M. Mischi, A.H.M. Jansen, R.P.J. de Waard, H.H.M. Korsten, "Contrast Ultrasound Methods for Left-Ventricle Ejection Fraction Measurements," IEEE-EMBS Proc. on the 27th Annual International Conference, Shanghai, 1-4 Sep., pp. 4306-4309, 2005.
- ❑ M. Ungureanu, J. W. M. Bergmans, M. Mischi, S. G. Oei, R. Strungaru, "Improved Method for Fetal Heart Rate Monitoring," IEEE-EMBS Proc. on the 27th Annual International Conference, pp. 4306-4309, Shanghai, 1-4 Sep., 2005.
- ❑ M. Mischi, A.H.M. Jansen, A.A.C.M. Kalker, H.H.M. Korsten, "Ultrasound-Contrast-Agent Dilution Systems and Cardiac Quantification," Poster presentation 19th Annual Advances in Contrast Ultrasound, Chicago (IL), Nov. 4-5, 2004.
- ❑ M. Mischi, A.A.C.M. Kalker, H.H.M. Korsten, "Identification of Ultrasound-Contrast-Agent Dilution Systems for Cardiac Quantification," Proc. on the IEEE International Ultrasonics, Ferroelectrics, and Frequency Control 50th Anniversary Joint Conference, Montreal (Canada), pp. 13-16, Aug. 23-27, 2004.
- ❑ M. Mischi, A.A.C.M. Kalker, H.H.M. Korsten, "Moment Method for the Local Density Random Walk Model Interpolation of Ultrasound Contrast Agent Dilution Curves," Proceedings on the 17th International EURASIP Conference BIOSIGNAL 2004, Brno (Czech Rep.), pp. 33-35, Jun. 23-25, 2004.
- ❑ M. Mischi, H.H.C.M. Kalker, H.H.M. Korsten, "Contrast echocardiographic quantification," Proc. Of the SPS Research Symposium, pp. 91-99, Eindhoven (NL).
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