

Publications – Environmental hydroacoustics lab (EHL)
Université libre de Bruxelles – <http://ehl.ulb.ac.be>

BOOKS

1. A. Caiti, R. Chapman, J.-P. Hermand, and S. M. Jesus, *Acoustic Sensing Techniques for the Shallow Water Environment: Inversion Methods and Experiments*. Oceanography, Dordrecht: Springer, June 2006.
2. A. Caiti, J.-P. Hermand, S. M. Jesus, and M. B. Porter, *Experimental Acoustic Inversion Methods for Exploration of the Shallow Water Environment*. Dordrecht: Kluwer Academic, June 2000.

BOOK CHAPTERS

1. P. Négrel, E. Petelet-Giraudi, G. Klaveri, A. Marsman, K. Jonesi, P. Middeldorp, N. Baran, A. Brenot, T. Gocht, P. Grathwohl, J.-P. Hermand, E. Kalbus, S. Meijer, R. Millot, C. Moeckel, F. Reinstorf, S. Roy, M. Schirmer, C. Schmidt, D. Steidle, B. van Os, and M. Verbanck, “Flux – mass transfer in river-sediment-soil-groundwater systems,” in *Advanced Tools and Models to Improve River Basin Management in Europe in the Context of Climate Change (AquaTerra) (book chapter)* (J. B. Michael Finkel and P. Grathwohl, eds.), chapter 4, pp. 22–32, London UK: IWA Publishing, 2010.
2. J.-P. Hermand, “Acoustic remote sensing of photosynthetic activity in seagrass beds (book chapter),” in *Scaling Methods in Aquatic Ecology. Measurement, Analysis, Simulation* (L. Seuront and P. G. Strutton, eds.), chapter 5, pp. 65–96, Boca Raton, Florida: CRC Press LLC, Sept. 2003.
3. J.-P. Hermand and L. Alberotanza, “A novel acoustic tomography experiment in the lagoon of Venice (book chapter),” in *La Ricerca Scientifica per Venezia. Il Progetto Sistema Lagunare Veneziano. Modellistica del Sistema Lagunare. Studio di Impatto Ambientale*, vol. II, part 1.4, pp. 199–222, Padova: Atti dell’ Istituto Veneto di Science, Lettere ed Arti, 2000.

PUBLICATIONS

1. O. Carrière and J.-P. Hermand, “Sequential Bayesian geoacoustic inversion for mobile and compact source-receiver configuration,” *J. Acoust. Soc. Amer.*, to be published.
2. O. Carrière and J.-P. Hermand, “Feature-oriented acoustic tomography for ocean observatories,” *IEEE J. Ocean. Eng.*, to be published.
3. E. F. Coelho, G. Peggion, and J.-P. Hermand, “On-scene ocean forecast model corrections using Monte-Carlo simulations,” *Dynamics of Atmospheres and Oceans (special issue in honor of Prof. A.R. Robinson)*, submitted for publication.
4. M. Asch, J.-P. Hermand, and M. Berrada, “Finite-element adjoint for a fully range-dependent parabolic equation,” in *Theoretical and Computational Acoustics* (C.-F. Chen, ed.), Apr. 2011.
5. Q.-Y. Ren, J.-P. Hermand, and S.-C. Piao, “Passive acoustic interferometry for sediment characterization in shallow water,” in *Theoretical and Computational Acoustics* (C.-F. Chen, ed.), Apr. 2011.
6. O. Carrière and J.-P. Hermand, “Feature-oriented acoustic tomography for ocean observatories (invited poster),” in *ESONET General Assembly Meeting*, European Commission, Dec. 2010.
7. O. Carrière, J.-P. Hermand, and Y. Stéphan, “Assimilation de données acoustiques : suivi du front d’Ouessant,” *Annales Hydrographiques (SHOM)*, vol. 7, pp. 4.1–4.7, Oct. 2010.
8. J.-P. Hermand, “Observation de la Posidonie par acoustique,” *Annales Hydrographiques (SHOM)*, vol. 7, pp. 9.1–9.8, Oct. 2010.
9. K. Siemes, M. Snellen, A. R. Amiri-SimKooei, D. G. Simons, and J.-P. Hermand, “Predicting spatial variability of sediment properties from hydrographic data for geoacoustic inversion,” *IEEE J. Ocean. Eng.*, vol. 35, pp. 766–778, Oct. 2010.
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2. O. Carrière, J.-P. Hermand, and Y. Stéphan, “Acoustic data assimilation: The Ushant front monitoring,” in *Proceedings du Séminaire sur la Surveillance et la Reconnaissance de l’Environnement par Acoustique Discrète (SERENADE)* (Y. Stéphan, C. Gervaise, and C. Liret, eds.), SHOM - ENSIETA - Océanopolis - Europôle Mer, Mar. 2010.
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