

# Laurent DAUDET - List of publications - updated July 29th, 2016

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## Peer-reviewed journal articles :

- A-1 **del Hougne P., Rajaei B., Daudet L. and Leroosey G.**, Intensity-only measurement of partially uncontrollable transmission matrix: demonstration with wave-field shaping in a microwave cavity, *Optics Express* (to appear, 2016).
- A-2 **Rajaei B., Gigan S., Krzakala F. and Daudet L.**, Fast phase retrieval for high dimensions: A block-based approach, *IEEE Signal Processing Letters* (to appear, 2016).
- A-3 **Nowakowski T., Daudet L. and De Rosny J.**, Localization of acoustic sensors from passive Green's function estimation, *Journal of the Acoustical Society of America*, 138 (5), pp. 3010-3018 (Nov 2015).
- A-4 **Bai H., Richard G. and Daudet L.**, Late reverberation synthesis: from Radiance Transfer to Feedback Delay Networks, *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 23 (12), pp. 2260-2271 (2015).
- A-5 **Drémeau, A., Liutkus, A., Martina, D., Katz, O., Schülke, C., Krzakala, F., Gigan, S. and Daudet, L.**, Reference-less measurement of the transmission matrix of a highly scattering material using a DMD and phase retrieval techniques, *Optics Express*, Vol. 23 (9), pp. 11898-11911 (2015).
- A-6 **Chardon G., Nowakowski T., De Rosny J. and Daudet L.**, A blind dereverberation method for narrowband source localization, *IEEE Journal of Selected Topics in Signal Processing*, Vol. 9 (5), pp. 815–824 (2015).
- A-7 **Liu N., Liutkus A., Aubry J.-F., Marsac L., Tanter M. and Daudet L.**, Random calibration for accelerating MR-ARFI guided ultrasonic focusing in transcranial therapy, *Physics in Medicine & Biology*, Vol. 60 (3), pp. 1069–1085 (2015).
- A-8 **Bilen C., Puy G., Gribonval R., and Daudet L.**, Convex Optimization Approaches for Blind Sensor Calibration using Sparsity, *IEEE Transactions on Signal Processing*, Vol. 62 (18), pp. 4847–4856 (2014).
- A-9 **Yaghoobi M., Daudet L. and Davies M.E.**, Dictionary Subselection Using an Overcomplete Joint Sparsity Model, *IEEE Transactions on Signal Processing*, Vol. 62 (17), pp. 4547–4556 (2014).
- A-10 **Liutkus A., Fitzgerald D., Rafii Z., Pardo B., and Daudet L.**, Kernel additive models for source separation, *IEEE Transactions on Signal Processing*, Vol. 62 (16), pp. 4298–4310 (2014).
- A-11 **Chardon G., Cohen A. and Daudet L.**, Sampling and reconstruction of solutions to the Helmholtz equation, *Sampling Theory in Signal and Image Processing*, Vol. 13 (1), pp. 67–89 (2014).
- A-12 **Chadefaux D., Le Carrou J.-L., Fabre B., and Daudet L.**, Investigation of the Harpist/Harp Interaction, (*selected post-proceedings, revised version of [D-24]*), *Springer Lecture Notes in Computer Science series, LCNS 8905*, pp. 3–19, (2014).
- A-13 **Moussallam M., Gramfort A., Daudet L., and Richard G.**, Blind Denoising with Random Greedy Pursuits, *IEEE Signal Processing Letters*, Vol. 21 (11), pp. 1341-1345; DOI 10.1109 / LSP.2014.2334231, (Nov. 2014).
- A-14 **Liutkus A., Martina D., Popoff S., Chardon G., Katz O., Leroosey G., Gigan S., Daudet L., and Carron I.**, Imaging With Nature: Compressive Imaging Using a Multiply Scattering Medium, *Scientific Reports* (4) 5552 ; doi:10.1038/srep05552 (July 2014).

- A-15 **Nowakowski T., De Rosny J. and Daudet L.**, Méthode parcimonieuse pour la localisation de sources en milieux réverbérants hétérogènes (selected post-proceedings, revised version of [D-17]), *Acoustique & techniques*, No. 75, pp. 47–53 (2014).
- A-16 **Mignot R., Chardon G. and Daudet L.**, Low Frequency Interpolation of Room Impulse Responses using Compressed Sensing, *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 22 (1), pp. 205–216 (2014).
- A-17 **Chadefaux D., Le Carrou J.-L., Fabre B., Wanderley M. and Daudet L.**, Gestural strategies in the harp performance, *Acta Acustica united with Acustica*, Vol. 99 (6), pp. 986–996, (Nov/Dec. 2013)
- A-18 **Mignot R., Daudet L. and Ollivier F.**, Room Reverberation Reconstruction: Interpolation of the Early Part using Compressed Sensing, *IEEE Transactions on Audio, Speech, and Language Processing*, vol. 21 (11), pp. 2301–2312, (Nov. 2013)
- A-19 **Chardon G. and Daudet L.**, Low-complexity computation of plate eigenmodes with Vekua approximations and the Method of Particular Solutions, *Computational Mechanics*, Vol 52(5), pp. 983–992 (2013)
- A-20 **Suied C., Drémeau A., Pressnitzer D., and Daudet L.**, Auditory sketches: Sparse representations of sounds based on perceptual models, *Computer Music Modelling and Retrieval (selected post-proceedings)*, Springer Lecture Notes in Computer Science, Vol. 7900, pp. 154–170 (2013).
- A-21 **Rigaud F., David B. and Daudet L.**, A parametric model and estimation techniques for the inharmonicity and tuning of the piano, *Journal of the Acoustical Society of America*, Vol. 133 (5), pp. 3107–3118 (2013).
- A-22 **Sturmel N. and Daudet L.**, Informed Source Separation using Iterative Reconstruction, *IEEE Transactions on Audio, Speech, and Language Processing*, Vol. 21 (1), pp. 178–185 (Jan. 2013).
- A-23 **Chardon G., Peillot A., Ollivier F., Bertin N., Gribonval R., and Daudet L.**, Nearfield Acoustic Holography using sparse regularization and compressive sampling principles, *Journal of the Acoustical Society of America*, Vol. 132 (3), pp. 1521–1534 (2012).
- A-24 **Chadefaux D., Wanderley M., Le Carrou J.-L., Fabre B. and Daudet L.**, Etude expérimentale de l'interaction musicien/instrument dans le cas de la harpe de concert (selected post-proceedings, revised version of [D-44]), *Acoustique & techniques*, No. 69, pp. 29–34 (2012).
- A-25 **Moussallam M., Daudet L. and Richard G.**, Matching Pursuits with Random Sequential Subdictionaries, *Signal Processing*, Vol. 92 (10), pp. 2532–2544, (Oct. 2012).
- A-26 **Drémeau A., Herzet C. and Daudet L.**, Boltzmann machine and mean-field approximation for structured sparse decompositions, *IEEE Transactions on Signal Processing*, Vol. 60 (7), pp. 3425–3438 (July 2012).
- A-27 **Chadefaux D., Le Carrou J.-L., Fabre B. and Daudet L.**, Experimentally-based description of harp plucking, *Journal of the Acoustical Society of America*, Special Issue on Musical Acoustics, Vol. 131 (1), pp. 844–855 (Jan 2012).
- A-28 **Sturm B. L. and Daudet L.**, Recursive Nearest Neighbor Search in a Sparse and Multiscale Domain for Comparing Audio Signals, *Signal Processing*, Special Issue on “100 years of wavelets: Advances in Multirate Filter Bank Structures and Multiscale Representations”, Vol. 91(12), pp. 2836–2851 (Dec. 2011).
- A-29 **Chardon G., Leblanc A. and Daudet L.**, Plate impulse response spatial interpolation with sub-Nyquist sampling, *Journal of Sound and Vibration*, Vol 330 (23), pp. 5678–5689, (Nov. 2011).
- A-30 **Lagrange M., Badeau R., David B., Bertin N., Derrien O., Marchand S. and Daudet L.**, Décompositions en Éléments Sonores et Applications Musicales, *Traitements du Signal*, extended and revised version of [D-62] (in French), Vol. 28 (6), pp. 665–689 (Oct. 2011).
- A-31 **Sturm B. L. and Daudet L.**, On Similarity Search in Audio Signals Using Adaptive Sparse Approximations, *Adaptive Multimedia Retrieval 2009 (selected post-proceedings, revised version of [D-71])*, Springer Lecture Notes in Computer Science series, LCNS 6535, pp. 59–71, (2011).

- A-32 **Morvidone M., Sturm B. L. and Daudet L.**, Incorporating Scale Information with Cepstral Features: Experiments on Musical Instrument Recognition, *Pattern Recognition Letters*, Vol. 31(12), pp. 1489–1497, (Sept. 2010).
- A-33 **Plumbley M., Blumensath T., Daudet L., Gribonval R. and Davies M.E.**, Sparse Representations in Audio and Music: From Coding to Source Separation, *Proceedings of the IEEE*, vol. 98 (6), pp. 995–1005, (June 2010).
- A-34 **Daudet L.**, Audio sparse decompositions in parallel : let the greed be shared !, *IEEE Signal Processing Magazine*, vol. 27(2), pp. 90–96, (Mar. 2010).
- A-35 **Ravelli E., Richard G. and Daudet L.**, Audio signal representations for indexing in the transform domain, *IEEE Transactions on Audio, Speech, and Language Processing*, Vol. 18(3), pp. 434–446, (Mar. 2010).
- A-36 **Yaghoobi M., Daudet L. and Davies M.E.**, Parametric dictionary design for sparse coding, *IEEE Transactions on Signal Processing*, vol. 57 (12), pp. 4800–4810, (Dec. 2009).
- A-37 **Defrance G., Daudet L. and Polack J.-D.**, Using Matching Pursuit for estimating mixing time within Room Impulse Responses, *Acta Acustica*, vol. 95 (6), pp. 1071–1081 (Nov./ Dec. 2009).
- A-38 **Ravelli E., Richard G. and Daudet L.**, Union of MDCT bases for audio coding, *IEEE Transactions on Audio, Speech, and Language Processing*, vol. 16 (8), pp. 1361–1372, (Nov. 2008).
- A-39 **Defrance G., Daudet L. and Polack J.-D.**, Finding the onset of a room impulse response: straightforward?, *Journal of the Acoustical Society of America - Express Letters*, vol. 124 (4), pp. EL248–254 (Oct. 2008).
- A-40 **Sturm B., Shynk J., Daudet L. and Roads C.**, Dark energy in sparse atomic decompositions, *IEEE Transactions on Audio, Speech, and Language Processing*, vol. 16 (3), pp. 671–676, (Mar. 2008).
- A-41 **Leveau P., Vincent E., Richard G. and Daudet L.**, Instrument-specific harmonic atoms for mid-level music representations, *IEEE Transactions on Audio, Speech, and Language Processing*, Vol.16 (1), pp. 116–128, (Jan. 2008).
- A-42 **Févotte C., Torrésani B., Daudet L. and Godsill S.J.**, Denoising of musical audio using sparse linear regression and structured priors, *IEEE Transactions on Audio, Speech, and Language Processing*, Vol.16 (1), pp. 174–185, (Jan. 2008).
- A-43 **Ravelli M. and Daudet L.**, Embedded polar quantization, *IEEE Signal Processing Letters*, Vol. 14 (10), pp. 657–660, (Oct. 2007).
- A-44 **Bello J.-P., Daudet L. and Sandler M.**, Automatic Piano Transcription Using Frequency and Time-Domain Information, *IEEE Transactions on Audio, Speech, and Language Processing*, Vol.14 (6), pp. 2242–2251, (Nov. 2006).
- A-45 **Daudet L.**, Sparse and structured decompositions of signals with the Molecular Matching Pursuit, *IEEE Transactions on Audio, Speech, and Language Processing*, Vol.14 (5), pp. 1808–1816, (Sept. 2006).
- A-46 **Davies M. and Daudet L.**, Sparse audio representations using the MCLT, *Signal Processing*, special issue : “Sparse Approximations in Signal and Image Processing”, Vol.86 (3), pp. 457–470, (March 2006).
- A-47 **Daudet L.**, A review on techniques for the extraction of transients in musical signals, *Computer Music Modeling and Retrieval, Springer Lecture Notes in Computer Science series : 3902* (extended and revised version of [D-97]), pp. 219–232 (2006).
- A-48 **Bello J.-P., Daudet L., Abdallah S., Duxbury C., Davies M. and Sandler M.**, A tutorial on onset detection in music signals, *IEEE Transactions on Speech and Audio Processing*, Vol. 13 (5.2), pp. 1035–1047, (Sept. 2005).

- A-49 **Daudet L. and Sandler M.**, MDCT analysis of sinusoids: explicit results and applications to coding artifacts reduction,  
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- A-50 **Daudet L. and Torrésani B.**, Hybrid representations for audiophonic signal encoding,  
*Signal Processing*, Vol. 82, No. 11, pp. 1595-1617 (2002).
- A-51 **Aramaki M., Bensa J., Daudet L., Guillemain P. and Kronland-Martinet R.**,  
Resynthesis of coupled piano string vibrations based on physical modeling,  
*Journal of New Music Research* Vol. 30, No.3, pp. 213–226 (2001).
- A-52 **Aramaki M., Bensa J., Daudet L., Guillemain P. and Kronland-Martinet R..**,  
Synthèse de sons musicaux: des modèles mécaniques aux modèles de signaux,  
*Revue de l'Electricité et de l'Electronique* (2), pp. 59–67 (Fev. 2001).
- A-53 **Counillon C., Daudet L., Podgorski T. and Limat L.**, Dynamics of a liquid columns array under periodic boundary conditions, *Physical Review Letters* **80** (10), pp. 2117–2120 (1998).
- A-54 **Counillon C., Daudet L., Podgorski T., Jullien M.C., Akamatsu S. and Limat L..**, Global drift of a circular array of liquid columns, *Europhysics Letters* **40** (1), pp. 37–42 (1997).
- A-55 **Daudet L., Ego V., Manneville S. and Bechhoefer J.**, Secondary instabilities of surface waves on viscous fluids in the Faraday instability, *Europhysics Letters* **32** (4), pp. 313–318 (1995).

#### Book chapters :

- B-1 **Bertin N., Daudet L., Emiya V., and Gribonval R.**, Compressive Sensing in Acoustic Imaging, in *Compressed Sensing and its Applications*, Boche, H., Calderbank, R., Kutyniok, G., Vybirdal, J. (Eds.), Birkhäuser, Springer (2015).
- B-2 **Daudet L. and Torrésani B.**, Sparse adaptive representations for musical signals, in *Signal Processing Methods for Music Transcription*, Klapuri A. and Davy M. eds., Springer, pp. 65–98 (2006).

#### Reports, monographs :

- C-1 **Daudet L.**, Représentations parcimonieuses des sons musicaux : modèles, algorithmes et applications, *Mémoire d'Habilitation à Diriger des Recherches*, Université Pierre et Marie Curie - Paris 6 (2008, in French).
- C-2 **Daudet L.**, Représentations structurelles des signaux audiophoniques, avec application au codage hybride, *Thèse de l'Université de Provence* (2000, in French).

#### Conference proceedings :

- D-1 **Rajaei B., Tramel E., Gigan S., Krzakala F. and Daudet L.**, Intensity-only optical compressive imaging using a multiply scattering material : a double phase retrieval system, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2016)*, Shanghai, China (2016).
- D-2 **Saade A., Caltagirone F., Carron I., Daudet L., Drémeau A., Gigan S. and Krzakala F..**, Random projections through multiple optical scattering : approximating kernels at the speed of light, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2016)*, Shanghai, China (2016).

- D-3 **Le T.-K., Ono N., Nowakowski T., Daudet L. and De Rosny J.**, Experimental validation of TOA-based methods for microphones array positions calibration, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2016), Shanghai, China* (2016).
- D-4 **Nowakowski T., Bertin N., Gribonval R. , De Rosny J. and Daudet L.**, Membrane shape and boundary conditions estimate using eigenmode decomposition, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2016), Shanghai, China* (2016).
- D-5 **Dokmanić I., Daudet L. and Vetterli M.**, From acoustic room reconstruction to SLAM, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2016), Shanghai, China* (2016).
- D-6 **Bai H., Richard G. and Daudet L.**, Geometric-based reverberator using Acoustic Rendering Networks, *Proceedings of the IEEE Workshop on Applications of Signal Processing to Audio and Acoustics, Mohonk, NY* (2015).
- D-7 **Dokmanić I., Daudet L. and Vetterli M.**, From Acoustic Room Reconstruction to SLAM *Proceedings of the 53rd Annual Allerton Conference on Communication, Control, and Computing, Monticello, IL, USA* (2015).
- D-8 **Drémeau, A., Liutkus, A., Martina, D., Katz, O., Schülke, C., Krzakala, F., Gigan, S. and Daudet, L.**, Approches Bayésiennes pour la reconstruction de phase - Application à l'optique des milieux complexes, *Proceedings of GRESTI'15, Lyon* (2015).
- D-9 **Nowakowski T., Daudet L., and De Rosny J.** , Comment “entendre” la forme d'un tambour avec quelques points de mesure ?, *Proceedings of GRESTI'15, Lyon* (2015).
- D-10 **Nowakowski T., Daudet L., and De Rosny J.** , Microphone array position calibration in the frequency domain using a single unknown source, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2015), Brisbane, Australia* (2015).
- D-11 **Dokmanić I., Daudet L. and Vetterli M.**, How to Localize Ten Microphones in One Finger Snap, *Proceedings of the 22th EUropean SIgnal Processing COnference (EUSIPCO'2014)*, Lisbon (2014).
- D-12 **Gigan S., Popoff S., Liutkus A., Martina D., Katz O., Chardon G., Carminati R., Lerosey G., Fink M., Boccara A.C., Carron I. and Daudet L.**, Image transmission through a scattering medium : inverse problem and sparsity-based imaging, *Proceedings of the IEEE 13th Workshop on Information Optics (WIO)*, Neuchâtel, Switzerland (2014). **Best paper award**
- D-13 **Liutkus A., Martina D., Gigan S. and Daudet L.**, Compressed Sensing Under Strong Noise. Application to Imaging Through Multiply Scattering Media, *Proceedings of the 22th EUropean SIgnal Processing COnference (EUSIPCO'2014)*, Lisbon, Portugal (2014).
- D-14 **Fitzgerald D., Liutkus A., Rafi Z., Pardo B., and Daudet L.**, Harmonic/Percussive Separation Using Kernel Additive Modelling, *25th Irish Signals and Systems Conference 2014 (ISSC 2014)*, Limerick, Ireland (2014).
- D-15 **Liutkus A., Rafi Z., Pardo B., Fitzgerald D. and Daudet L.**, Kernel spectrogram models for source separation, *4th Joint Workshop on Hands-free Speech Communication and Microphone Arrays (HSCMA 2014)*, Nancy, France (2014).
- D-16 **Daudet L., Bertin N., Emiya V. and Gribonval R.**, Acquisition comprimée en acoustique audible, *Congrès Français d'Acoustique*, Poitiers, France (2014). **Invited contribution**
- D-17 **Nowakowski T., De Rosny J. and Daudet L.**, Méthode parcimonieuse pour la localisation de sources en milieux réverbérants hétérogènes, *Congrès Français d'Acoustique*, Poitiers, France (2014).
- D-18 **Emiya V., Bonnefoy A., Gribonval R., and Daudet L.** Compressed sensing with unknown sensor permutation, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2014), Florence, Italy* (2014).
- D-19 **Moussallam M. and Daudet L.** A General Framework For Dictionary Based Audio Fingerprinting, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2014), Florence, Italy* (2014).

- D-20 **Duan Z., Pardo B. and Daudet L.**, A Novel Cepstral Representation For Timbre Modeling Of Sound Sources In Polyphonic Mixtures, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2014)*, Florence, Italy (2014).
- D-21 **Badar S., Ono N. and Daudet L.**, Microphone Multiplexing with Diffuse Noise Model-based Principal Component Analysis, *Proceedings of the IEEE Workshop on Applications of Signal Processing to Audio and Acoustics*, Mohonk, NY (2013).
- D-22 **Rigaud F., Drémeau A., David B. and Daudet L.**, A Probabilistic Line Spectrum Model for Music. Application to Piano Tuning Estimation, *Proceedings of the IEEE Workshop on Applications of Signal Processing to Audio and Acoustics*, Mohonk, NY (2013).
- D-23 **Bai H., Richard G. and Daudet L.**, Modeling Early Reflections of Room Impulse Responses Using a Radiance Transfer Method, *Proceedings of the IEEE Workshop on Applications of Signal Processing to Audio and Acoustics*, Mohonk, NY (2013).
- D-24 **Chadefaux D., Le Carrou J.-L., Fabre B., and Daudet L.**, Investigation of the Harpist/Harp Interaction, *Proceedings of Computer Music Modeling and Retrieval workshop (CMMR'2013)*, Marseille (2013).
- D-25 **Bilen C., Puy G., Gribonval R., and Daudet L.**, Blind Phase Calibration in Sparse Recovery, *Proceedings of EUSIPCO13*, Marrakech (2013).
- D-26 **Liutkus A., Martina D., Katz O., Daudet L. and Gigan S.**, Utilisation d'un milieu optique diffusant pour la caractérisation de modulateurs spatiaux de lumière, *Proceedings of GRETI'13*, Brest (2013).
- D-27 **Nowakowski T., Daudet L., De Rosny J. and Chardon G.**, Localisation de sources en milieu réverbérant par décomposition parcimonieuse du champ acoustique sur un modèle hybride pression-vitesse, *Proceedings of GRETI'13*, Brest (2013).
- D-28 **Moussallam M., Gramfort A., Daudet L., and Richard G.**, Débruitage aveugle par décompositions parcimonieuses et aléatoires, *Proceedings of GRETI'13*, Brest (2013).
- D-29 **Liutkus A., Durrieu J.-L., Daudet L., and Richard G.**, An overview of informed audio source separation *Proceedings of the International Workshop on Image Analysis for Multimedia Interactive Services*, Paris (2013).
- D-30 **Chardon G., Cohen A. and Daudet L.**, Reconstruction of solutions to the Helmholtz equation from punctual measurements, *Proceedings of SAMPTA'13*, Bremen (2013).
- D-31 **Bilen C., Puy G., Gribonval R., and Daudet L.**, Blind Sensor Calibration in Sparse Recovery Using Convex Optimization, *Proceedings of SAMPTA'13*, Bremen (2013).
- D-32 **Rigaud F., Falaize A., David B. and Daudet L.**, Does inharmonicity improve an NMF-based piano transcription model ?, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2013)*, Vancouver (2013).
- D-33 **Capobianco J., Pallone G. and Daudet L.**, Low complexity transient detection in audio coding using an image edge detection approach, *Proceedings of AES 133nd Convention*, San Francisco (2012).
- D-34 **Marchand S., Badeau R., Baras C., Daudet L., Fourer D., Girin L., Gorlow S., Liutkus A., and Pinel J.**, DReAM: a novel system for joint source separation and multi-track coding, *Proceedings of AES 133nd Convention*, San Francisco (2012).
- D-35 **Sturmel N., Daudet L. and Girin L.**, Phase-based informed source separation for active listening of music, *Proceedings of the Digital Audio Effects Workshop (DAFx'2012)*, York (2012).
- D-36 **Liutkus A., Gorlow S., Sturmel N., Zhang S., Girin L., Badeau R., Daudet L., Marchand S. and Richard G.**, Informed audio source separation: a comparative study, *Proceedings of the 20th European Signal Processing COnference (EUSIPCO'2012)*, Bucharest (2012).
- D-37 **Fenet S., Moussallam M., Grenier Y., Richard G. and Daudet L.**, A framework for fingerprint-based detection of repeating objects in multimedia streams, *Proceedings of the 20th European Signal Processing COnference (EUSIPCO'2012)*, Bucharest (2012).

- D-38 **Moussallam M., Richard G. and Daudet L.**, Audio source separation informed by redundancy with greedy multiscale decompositions, *Proceedings of the 20th European Signal Processing Conference (EUSIPCO'2012)*, Bucharest (2012).
- D-39 **Rigaud F., David B. and Daudet L.**, Piano sound analysis using non-negative matrix factorization with inharmonicity constraint, *Proceedings of the 20th European Signal Processing Conference (EUSIPCO'2012)*, Bucharest (2012).
- D-40 **Sturmel N., Liutkus A., Pinel J., Girin L., Marchand S., Richard G., Badeau R., and Daudet L.**, Linear mixing models for active listening of music productions in realistic studio conditions, *Proceedings of AES 132nd Convention, Budapest* (2012).  
**Best peer-reviewed paper award.**
- D-41 **Mignot R., Daudet L. and Ollivier F.**, Interpolation of room impulse responses in 3d using compressed sensing, *Proceedings of Acoustics'2012, Nantes* (2012).
- D-42 **Peillot A., Ollivier F., Chardon G. and Daudet L.**, Acoustic sources joint localization and characterization using compressive sampling, *Proceedings of Acoustics'2012, Nantes* (2012).
- D-43 **Chardon G. and Daudet L.**, Source localisation in an unknown reverberant environment using compressive sampling in the frequency domain, *Proceedings of Acoustics'2012, Nantes* (2012).
- D-44 **Chadefaux D., Wanderley M., Le Carrou J.-L., Fabre B. and Daudet L.**, Experimental study of the musician / instrument interaction in the case of the concert harp, *Proceedings of Acoustics'2012, Nantes* (2012).
- D-45 **Gribonval R., Chardon G. and Daudet L.**, Blind calibration for compressed sensing by convex optimization, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2012), Kyoto* (2012).
- D-46 **Chardon G. and Daudet L.**, Narrowband source localization in an unknown reverberant environment using wavefield sparse decomposition, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2012), Kyoto* (2012).
- D-47 **Moussallam M., Daudet L. and Richard G.**, Random time-frequency Subdictionary design for sparse representation with greedy algorithms, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2012), Kyoto* (2012).
- D-48 **Drémeau A., Herzet C. and Daudet L.**, Structured Bayesian Orthogonal Matching Pursuit, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2012), Kyoto* (2012).
- D-49 **Sturmel N. and Daudet L.**, Iterative Phase reconstruction of Wiener filtered signals, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2012), Kyoto* (2012).
- D-50 **Capobianco J., Pallone G. and Daudet L.**, Dynamic strategy for window splitting, parameters estimation and interpolation in spatial parametric audio coders, *Proceedings of International Conference on Acoustics Speech and Signal Processing (ICASSP'2012), Kyoto* (2012).
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- D-56 **Chardon G. and Daudet L.**, Computation of plate eigenmodes with the plane wave decomposition method, *Proceedings of WAVES 2011 workshop, Vancouver (Canada)* (2011).
- D-57 **Peillot A., Ollivier F., Chardon G. and Daudet L.**, Localization and identification of sound sources using “compressive sampling” techniques. *Proceedings of ICSV 2011 conference, Rio de Janeiro* (2011).
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- G-3 *Localisation de sources acoustiques en milieu réverbérant par déréverbération semi-aveugle*, (with T Nowakowski, J De Rosny), Congrès Français de Mécanique, Lyon, France, 08/2015.

- G-4 *Blind source localization in a room based on wavefield separation*, (with T Nowakowski, J De Rosny, and F Ollivier), 169th Meeting of the Acoustical Society of America, Pittsburgh, Pennsylvania, USA, 05/2015, abstract in the Journal of the Acoustical Society of America 137 (4), p. 2388.
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- G-13 *Overcomplete Joint Sparsity Model for Dictionary Selection*, (with M. Yaghoobi and M. Davies), BASP Frontiers workshop, Villars, 01/2013.
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- G-15 *The why, how, and what of sparse representations for audio and acoustics*, CMMR workshop, London (UK), **invited keynote talk**, 06/2012.
- G-16 *Compressively sampling solutions of the Helmholtz equation* (with G. Chardon and A. Cohen), iTwist workshop, CIRM Marseille, 05/2012.
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