Jakob Lemvig - DTU Orbit (04/02/2018)

Lemvig, Jakob
jakle@dtu.dk

Department of Applied Mathematics and Computer Science - Associate Professor
Mathematics

Publications:

**Gabor frames on locally compact abelian groups and related topics**
Compute PHD-2016; No. 436).
Publication: Research › Ph.D. thesis – Annual report year: 2017

**On multivariate Wilson bases**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

**On Wilson bases in $L^2(\mathbb{R}^d)$**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**System bandwidth and the existence of generalized shift-invariant frames**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Co-compact Gabor Systems on Locally Compact Abelian Groups**
Publication: Research - peer-review › Journal article – Annual report year: 2015

**Counterexamples to the B-spline Conjecture for Gabor Frames**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**Explicit constructions and properties of generalized shift-invariant systems in L2(R)**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**On some Hermite series identities and their applications to Gabor analysis**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**Reproducing formulas for generalized translation invariant systems on locally compact abelian groups**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**Wavelets for Non-expanding Dilations and the Lattice Counting Estimate**
Publication: Research - peer-review › Journal article – Annual report year: 2016
A characterization of tight and dual generalized translation invariant frames
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Density and duality theorems for regular Gabor frames
Publication: Research - peer-review › Journal article – Annual report year: 2015

Duality results for co-compact Gabor systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Prime tight frames
Publication: Research - peer-review › Journal article – Annual report year: 2012

Sparse Matrices in Frame Theory
Lemvig, J., Krahmer, F. & Kutyniok, G. 2014 In : Computational Statistics. 29, 3-4, p. 547-568
Publication: Research - peer-review › Journal article – Annual report year: 2012

Sparsity and spectral properties of dual frames
Krahmer, F., Kutyniok, G. & Lemvig, J. 2013 In : Linear Algebra and Its Applications. 439, 4, p. 982–998
Publication: Research - peer-review › Journal article – Annual report year: 2012

Constructing pairs of dual bandlimited frame wavelets in L^2(R^n)
Lemvig, J. 2012 In : Applied and Computational Harmonic Analysis. 32, 3, p. 313-328
Publication: Research - peer-review › Journal article – Annual report year: 2011

Optimally sparse approximations of 3D functions by compactly supported shearlet frames
Publication: Research - peer-review › Journal article – Annual report year: 2012

Oversampling of wavelet frames for real dilations
Publication: Research - peer-review › Journal article – Annual report year: 2011

Shearlets and Optimally Sparse Approximations
Publication: Research - peer-review › Book chapter – Annual report year: 2012

Affine and quasi-affine frames for rational dilations
Publication: Research - peer-review › Journal article – Annual report year: 2011

Constructing pairs of dual bandlimited framelets with desired time localization
Lemvig, J. 2009 In : Advances in Computational Mathematics. 30, 3, p. 231-247
Publication: Research - peer-review › Journal article – Annual report year: 2009

Wavelet frames and their duals
Publication: Research › Ph.D. thesis – Annual report year: 2008
Constructing pairs of dual bandlimited framelets with desired time localization
Publication: Research › Report – Annual report year: 2007

The canonical and alternate duals of a wavelet frame
Publication: Research - peer-review › Journal article – Annual report year: 2007

The canonical and alternate duals of a wavelet frame
Lemvig, J. 2007
Publication: Research › Poster – Annual report year: 2007

The canonical and alternate duals of a wavelet frame
Lemvig, J. 2007
Publication: Research › Sound/Visual production (digital) – Annual report year: 2007

The canonical and alternate duals of a wavelet frame
Lemvig, J. 2007
Publication: Research › Conference abstract for conference – Annual report year: 2007

The canonical and alternate duals of a wavelet frame
Lemvig, J. 2007
Publication: Research › Conference abstract for conference – Annual report year: 2007

The frame set for Gabor systems generated by B-splines
Nielsen, K. H., Lemvig, J. & Christensen, O.
01/08/2016 → 31/07/2019
Project: PhD

Mathematic and Efficient Signal Representation
Hasannasabjaldehbakhani, M., Christensen, O. & Lemvig, J.
01/12/2015 → 30/11/2018
Project: PhD

Gabor Frames, their Duals and Applications in Engineering
Jakobsen, M. S., Christensen, O., Lemvig, J., Knudsen, K., Feichtinger, H. & Hernández, E.
01/10/2013 → 23/11/2016
Project: PhD

Wavelet Frames in theory and Practice
Lemvig, J., Christensen, O., Hansen, P. C., Goh, S. S. & Laugesen, R. S.
01/08/2005 → 05/11/2008
Project: PhD

Projects:

Activities: