

Listado de artículos para el trabajo final del curso APAS 2009:

Seleccionar 3 posibilidades y enviar propuesta por mail a la responsable del curso: Dra Maria Eugenia Torres <metorres@santafe-conicet.gov.ar> antes del viernes 04/09/09. La asignación definitiva se realizará por mail hasta el día viernes 18/09/09. La fecha de entrega del trabajo y defensa oral será el viernes 23/10/09 a las 09:00 hs (junto con la entrega de los trabajos prácticos). Las pautas para la elaboración de los trabajos se encuentran en el documento “**pautas.pdf**” en esta misma página.

- 1) A. Gupta, S. Joshi, S. Prasad
A new method of estimating wavelet with desired features from a given signal
Signal Processing, Volume 85, Issue 1, January 2005, Pages 147-161
Digital Object Identifier (DOI): <http://dx.doi.org/10.1016/j.sigpro.2004.09.008>

- 2) P. Shui, Z. Bao
Construction of nearly orthogonal interpolating wavelets
Signal Processing, Volume 79, Issue 3, December 1999, Pages 289-300
DOI: [http://dx.doi.org/10.1016/S0165-1684\(99\)00102-4](http://dx.doi.org/10.1016/S0165-1684(99)00102-4)

- 3) I. Cohen, S. Raz and D. Malah
Orthonormal shift-invariant wavelet packet decomposition and representation
Signal Processing, Volume 57, Issue 3, March 1997, Pages 251-270
DOI: [http://dx.doi.org/10.1016/S0165-1684\(97\)00007-8](http://dx.doi.org/10.1016/S0165-1684(97)00007-8)

- 4) A. Muñoz, R. Ertlé and M. Unser
Continuous wavelet transform with arbitrary scales and $O(N)$ complexity
Signal Processing, Volume 82, Issue 5, May 2002, Pages 749-757
DOI: [http://dx.doi.org/10.1016/S0165-1684\(02\)00140-8](http://dx.doi.org/10.1016/S0165-1684(02)00140-8)

- 5) M. Vrhel, C. Lee and M. Unser
Fast continuous wavelet transform: A least-squares formulation
Signal Processing, Volume 57, Issue 2, March 1997, Pages 103-119
DOI: [http://dx.doi.org/10.1016/S0165-1684\(96\)00189-2](http://dx.doi.org/10.1016/S0165-1684(96)00189-2)

- 6) D. Nelson and E. Smith
A linear model for the distribution of signals in time and frequency with a historical perspective of conventional time–frequency distributions
Digital Signal Processing, Volume 18, Issue 2, March 2008, Pages 81-102
DOI: <http://dx.doi.org/10.1016/j.dsp.2007.04.004>

- 7) Lu, Y.M. Do, M.N.
A Theory for Sampling Signals From a Union of Subspaces
IEEE Transactions on Signal Processing, Volume: 56, Issue: 6, pp 2334 - 2345, June 2008
DOI: <http://dx.doi.org/10.1109/TSP.2007.914346>

- 8) Blumensath, T. Davies, M.E. ,
Sampling Theorems for Signals From the Union of Finite-Dimensional Linear Subspaces,
Information Theory, IEEE Transactions on,

Volume: 55, Issue: 4 , page(s): 1872-1882, April 2009
DOI: <http://dx.doi.org/10.1109/TIT.2009.2013003>

9) Casinovi, G. ,
Sampling and Ergodic Theorems for Weakly Almost Periodic Signals
IEEE Transactions on Information Theory, Volume: 55, Issue: 4,
page(s): 1883-1897, April 2009
DOI: <http://dx.doi.org/10.1109/TIT.2009.2013021>

10) Eldar, Yonina C.; Mishali, Moshe;
Block sparsity and sampling over a union of subspaces
Digital Signal Processing, 2009 16th International Conference on
5-7 July 2009 Page(s):1 - 8
DOI: <http://dx.doi.org/10.1109/ICDSP.2009.5201211>

11) Veitch, D., Hohn, N., and Abry, P. 2005.
Multifractality in TCP/IP traffic: the case against. Comput. Netw. 48,
3 (Jun. 2005), 293-313.
DOI: <http://dx.doi.org/10.1016/j.comnet.2004.11.011>

12) Herwig Wendt, Patrice Abry,
"Multifractality Tests using Bootstrapped Wavelet Leaders",
IEEE Trans. Signal Processing, vol. 55, no. 10, pp. 4811-4820, 2007.
(http://perso.ens-lyon.fr/patrice.abry/ARTICLES_PDF/WendtAbry07.pdf)

13) R.G. BARANIUK, P. FLANDRIN, A.J.E.M. JANSSEN, O. MICHEL, 2001 :
"Measuring Time-Frequency Information Content Using the Rényi Entropies,"
IEEE Trans. on Info. Theory, Vol. 47, No. 4, pp. 1391-1409.
(http://perso.ens-lyon.fr/patrick.flandrin/IEEE_IT2001.pdf)

14) Holger Rauhut, Karin Schass, and Pierre Vandergheynst,
"Compressed sensing and redundant dictionaries".
IEEE Trans. on Information Theory, 54(5), pp. 2210 - 2219, May 2008.
http://arxiv.org/PS_cache/math/pdf/0701/0701131v1.pdf

15) Emmanuel Ravelli, Gal Richard, and Laurent Daudet,
"Union of MDCT Bases for Audio Coding",
IEEE Trans. on Audio, Speech and Language Processing, Vol. 16, No. 8, NOV. 2008.
www.tsi.enst.fr/~grichard/Publications/TSALP_ravelli08.pdf

16) Bob L. Sturm, John J. Shynk, Laurent Daudet and Curtis Roads,
"Dark Energy in Sparse Atomic Estimations",
IEEE Trans. on Audio, Speech and Language Processing, Vol. 16, No 3, MARCH
2008.
http://old.lam.jussieu.fr/src/Membres/Daudet/Publications_files/Sturm_TSALP08.pdf

17) Ivana Radulovic and Pascal Frossard,
"Multiple Description Coding with Redundant Expansions and Application to Image
Communications",

EURASIP Journal on Image and Video Processing
Volume 2007, Article ID 24863.

<http://www.hindawi.com/journals/ivp/2007/024863.pdf>

18) Philippe Jost, Pierre Vandergheynst and Pascal Frossard,
"Tree-Based Pursuit: Algorithm and Properties",
IEEE Transactions on Signal Processing, Vol. 54, NO. 12, DECEMBER 2006.
<http://lts4www.epfl.ch/~frossard/publications/pdfs/tsp2006.pdf>

19) Emmanuel Candès, Justin Romberg, and Terence Tao,
"Robust uncertainty principles: Exact signal reconstruction from highly incomplete
frequency information".
IEEE Trans. on Information Theory, 52(2) pp. 489 - 509, February 2006.
http://www.acm.caltech.edu/~jrom/publications/CandesRombergTao_revisedNov2005.pdf

20) Emmanuel Candès and Justin Romberg, "Quantitative robust uncertainty principles
and optimally sparse decompositions".
Foundations of Comput. Math., 6(2), pp. 227 - 254, April 2006.
<http://www.acm.caltech.edu/~emmanuel/papers/RandomBasisPursuit.pdf>

21) David Donoho,
"Compressed sensing".
IEEE Trans. on Information Theory, 52(4), pp. 1289 - 1306, April 2006.
<http://www-stat.stanford.edu/~donoho/Reports/2004/CompressedSensing091604.pdf>

22) Laurent Daudet,
"Sparse and Structured Decompositions of Signals with the Molecular Matching
Pursuit",
IEEE Transactions on Audio, Speech and Language Processing , Vol. 14, No. 5,
SEPTEMBER 2006.
DOI: <http://doi.ieeecomputersociety.org/10.1109/TSA.2005.858540>

23) Adelino R. Ferreira da Silva,
"A Pursuit Architecture for Signal Analysis",
Lecture Notes in Computer Science 2037, pp. 307-316, 2001. E.J.W. Boers et al. (Eds.)
EvoWorkshop 2001, Springer-Verlag Berlin Heidelberg 2001.
<http://www.springerlink.com/index/ddvdg1je5qye9u76.pdf>