

# **A Variable Weight Mixed-Norm Adaptive Algorithm**

Zerguine, A. Abounasr, T.; Dept. of Electr. Eng., King Fahd Univ. of Pet. Miner.,  
Dhahran;

**Acoustics, Speech, and Signal Processing, 2002. Proceedings. (ICASSP '02). IEEE  
International conference; Publication Date: 2002; Vol: 2, On page(s): 1401-  
1404; ISBN: 0-7803-7402-9**

King Fahd University of Petroleum & Minerals

**<http://www.kfupm.edu.sa>**

## **Summary**

The convergence analysis of the variable weight mixed-norm LMS-LMF adaptive algorithm is derived. A novel approach is used to study the convergence behavior of three algorithms: mixed-norm LMS- and LMF-based ones. As a by-product of this novel approach, more general and new necessary and sufficient conditions and excess steady-state error for the LMF have been derived

For pre-prints please write to: [abstracts@kfupm.edu.sa](mailto:abstracts@kfupm.edu.sa)