

---

Rosemary A. Renaut  
**Parallel Variable Distribution for Total Least Squares**

Department of Mathematics and Statistics  
Arizona State University  
Tempe  
AZ 85287 1804  
[renaut@asu.edu](mailto:renaut@asu.edu)  
Hongbin Guo

A novel parallel method for determining an approximate total least squares (TLS) solution is introduced. Based on domain distribution, the global TLS problem is partitioned into several dependent TLS subproblems. A convergent algorithm using the parallel variable distribution technique (Ferris and Mangasarian, 1994) is presented. Numerical results support the development and analysis of the algorithms.