

1023-11-222

**Marc Chamberland\*** ([chamber1@math.grinnell.edu](mailto:chamber1@math.grinnell.edu)), Department of Mathematics and Statistics, Grinnell College, Grinnell, IA 50112. *PSLQ Does Functions Too!* Preliminary report.

The PSLQ algorithm, hailed as one of the top ten algorithms of the 20th century, has been used to conjecture impressive closed forms for various integrals and infinite series. This talk explores how it can be used to find relationships between various functions. Examples will include Fibonacci numbers, Eisenstein series, and Ramanujan's incredible 6-10-8 formula. (Received August 25, 2006)