1011-68-388   **Rahul Santhanam*** (`rahul@cs.uchicago.edu`), School of Computing Sciences, Simon Fraser
University, Vancouver, B.C. V5A 1S6, Canada. *Hierarchies for Smoothed Probabilistic
Classes.* Preliminary report.

Smoothed analysis and discrete versions thereof (Blum-Spencer95, Feige-Kilian98, Spielman-Teng01) have emerged as popular alternatives to average-case analysis of algorithms. We consider smoothed analysis in a complexity-theoretic context and show hierarchies for various smoothed probabilistic time classes. (Received August 31, 2005)