

STANFORD UNIVERSITY
DEPARTMENT OF STATISTICS
DEPARTMENTAL SEMINAR

4:15 p.m., Tuesday, February 6, 2007
Sequoia Hall Room 200
(Cookies at 3:45 in 1st Floor Lounge)

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Evolving Statistical Computing for the Future

The implementations of the S language (R and S-Plus) have been remarkably successful, both technically and also in fostering an active community that generates software for statistical methods. This success has been very important for the field of statistics, but it has also inhibited more ambitious/experimental research on systems for the future, and has even stifled innovations in areas that challenge us immediately. I'll discuss some of the work that has been done in R to address some of these challenges, and then focus on technical and sociological issues in developing the next generation system. I'll outline what I think will be some of the important changes and contrast different approaches and strategies. Important themes for the future include an ease by which "users" can extend the core system so that the system becomes a rich environment for new research and changes in paradigm, a focus on making statistical software available to non-statisticians in accessible manners, and the need for enhanced support in moving from interactive use to software development.