

STANFORD UNIVERSITY
DEPARTMENT OF STATISTICS
DEPARTMENTAL SEMINAR

4.15pm, Tuesday, July 3, 2007
Sequoia Hall Room 200
(Cookies at 3:45 in 1st Floor Lounge)

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Voice Over the Internet

The characteristics and performance of voice traffic over the Internet (VoIP) are studied and modeled through the analysis of VoIP data. VoIP packet traces are collected from two Internet links. Call detail records are available for one of the two links. The accuracy and consistency of the data available are verified by the comparison of call detail records and the packet trace measurements. Moreover, the call arrival process, the statistical properties of the aggregated voice traffic on the links, the detailed packet dynamics of individual calls, packet jitter and delay, silence suppression, and the bandwidth needed to satisfy quality of service criteria are addressed in the talk.

This work is joint with Hui Chen, William S. Cleveland and Thomas Telkamp.