CSC2209
Computer Networks

Workload Measurement

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What is Workload vs. System Characterization?

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- Workload:
  - Cacheability of Web requests
  - Degree of Web pages' in-link
  - Size of P2P objects

- System:
  - Internet path inflation
  - Characteristics of P2P hostss

UW Study

Distribution of Heavy-hitters (1/4)
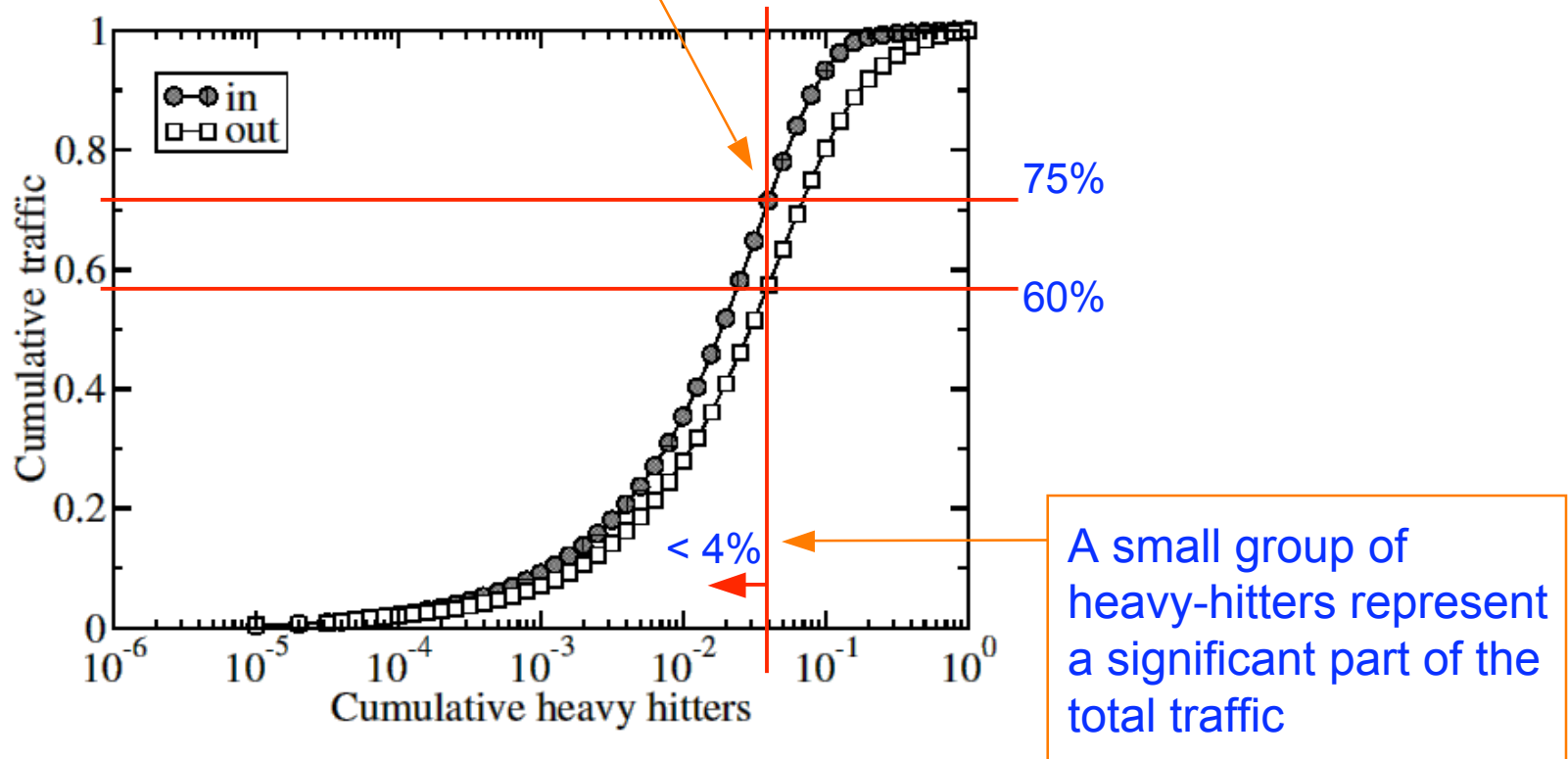
a skewed traffic distribution among users

Figure 11: Cumulative distribution of traffic volume of heavy-hitters in decreasing order of volume

A small group of heavy-hitters represent a significant part of the total traffic

Slide from Li-Ming Chen

Miscellaneous

- Web caching has become irrelevant
  - 1 AVI download == 2 Web users browsing for 1 year!!!

- Internet pipes are carrying the same bytes over and over and over again
  - Many pipes are carrying bytes of "007 Casino Royale!!!" as we speak

- Long flow management
  - Congestion control schemes differentiating long vs. short flows
  - Garbage collection of long flows? How?