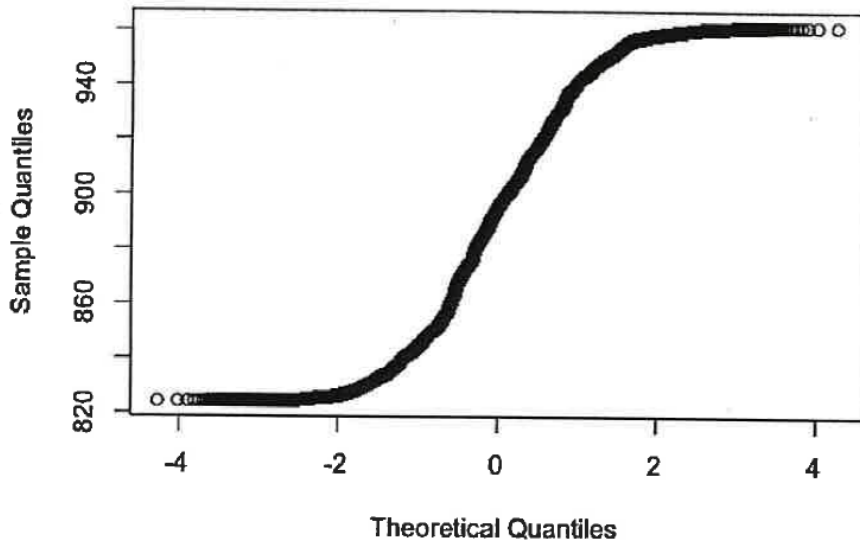
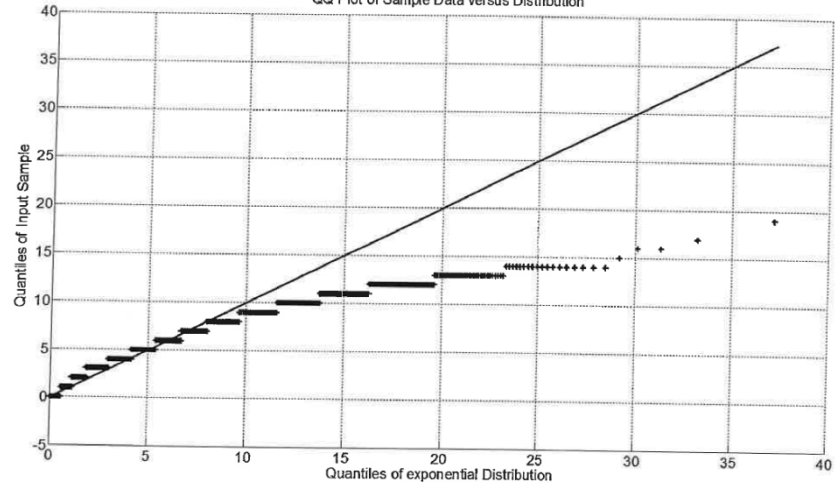


Home assignment 1 – trace statistics

Normal Q-Q Plot

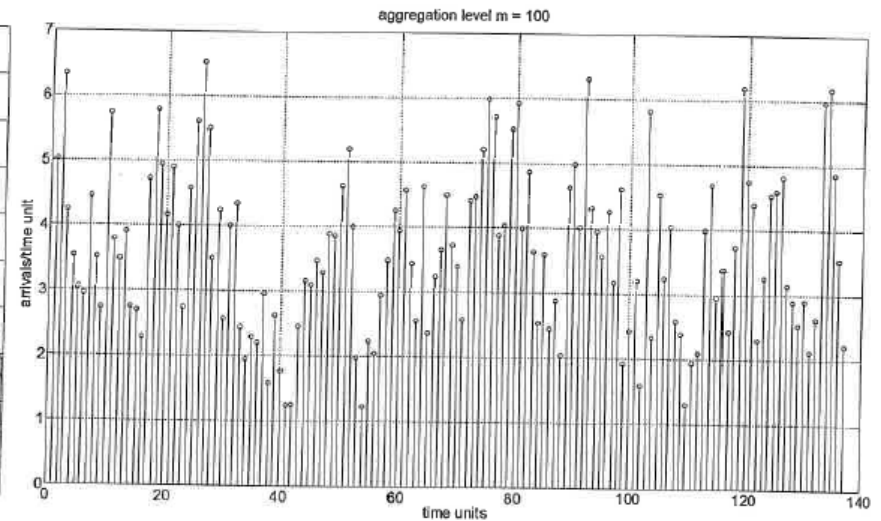
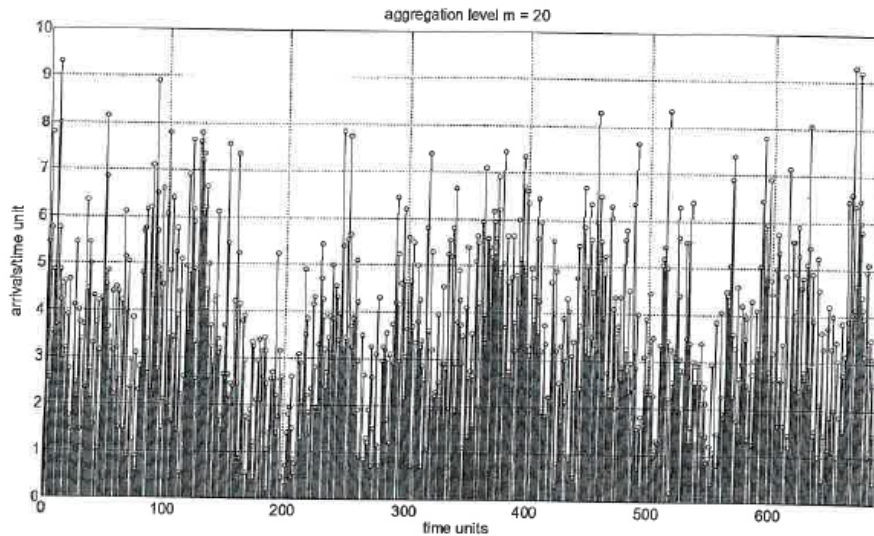


QQ Plot of Sample Data versus Distribution



- Heavy tailness
- Packet interarrival times (Alfonso, Filip) – light or heavy tail?

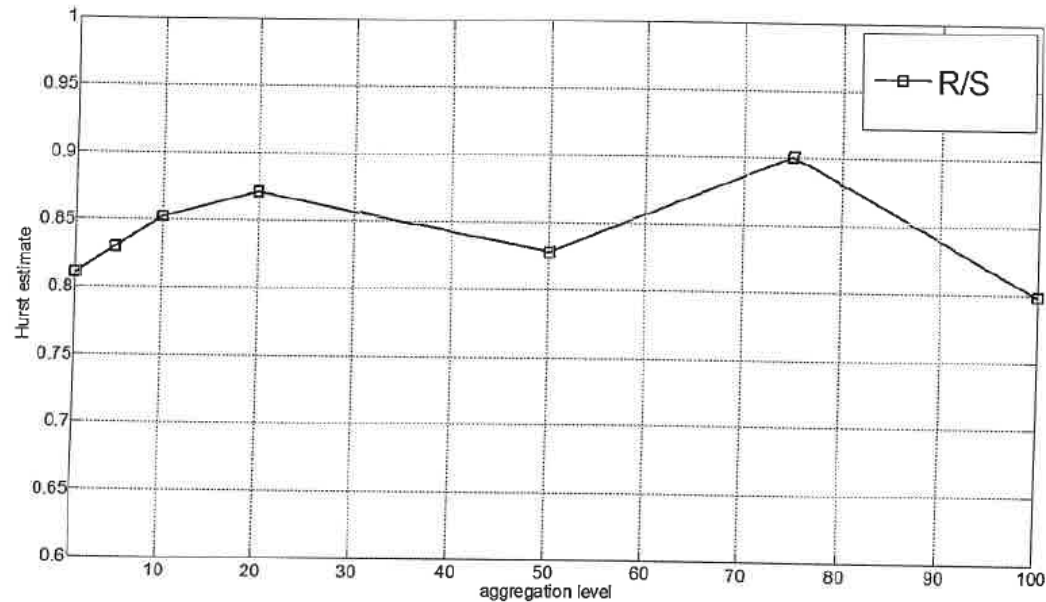
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- Self similarity of packet arrival process
- Packet arrival histogram (Filip ... and many others) – SS like
- Definition: $r^m(k)=r(k)$

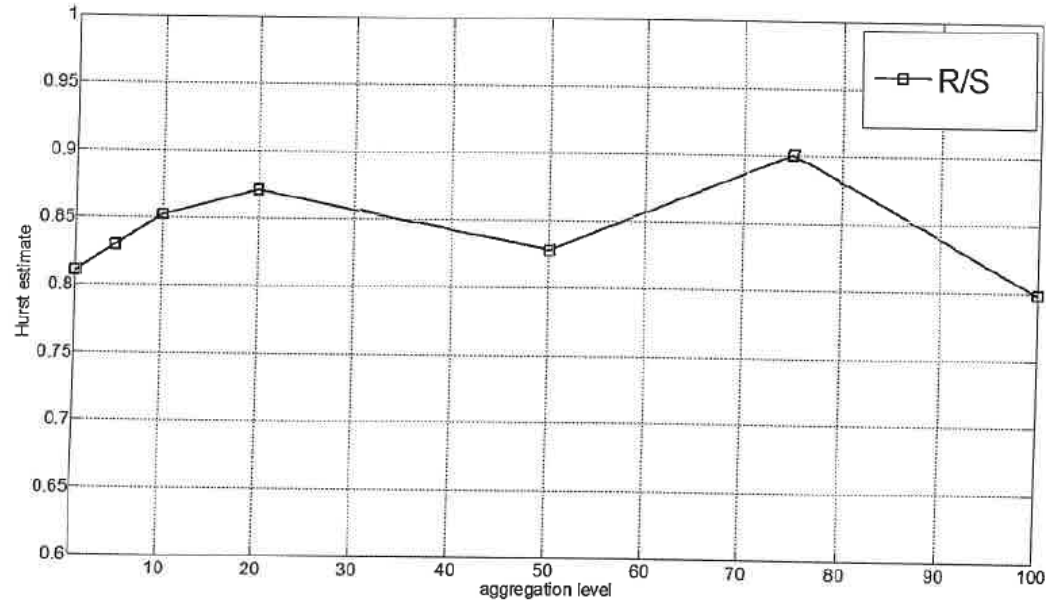
$$r(k) \sim H(2H - 1) \frac{1}{k^{2(1-H)}}, \quad 0 < H < 1, H \neq 0.5$$

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- Self similarity of packet arrival process
- Definition: $r^m(k)=r(k)$ $r(k) \sim H(2H-1)\frac{1}{k^{2(1-H)}}$, $0 < H < 1, H \neq 0.5$
- H parameter estimation for different m (Filip)

Home assignment 1 – trace statistics



- Long range dep: $\sum_{k=1}^{\infty} r(k) = \infty$ - note, we can not use this, we have only finite samples!
- LRD+SS: Hurst parameter above 0.5