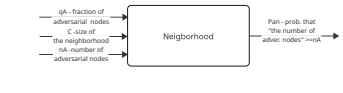
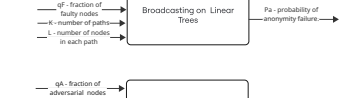
N - number of nodes
T - number of slots per epoch
f - fraction of non-empty slots
Δ t=1s
Leader Election Process
Txf messages per epoch on average.

N - number of nodes
n - number of sender nodes
KxL - number of nodes sampled (without repl.) by each sender node
Sampling of Linear Trees
P(c>1 | n,KL/N) - is the prob. that a node participates in more than one linear tree.

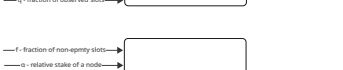

qA - fraction of adversarial nodes
C -size of the neighborhood
nA -number of adversarial nodes
Neigborhood
Pan - prob. that "the number of adver. nodes" >=nA

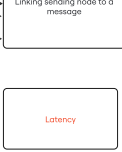

qF - fraction of faulty nodes
K - number of paths
L - number of nodes in each path
Broadcasting on Linear Trees
Pb - probability of broadcast failure.

qA - fraction of adversarial nodes
qF - fraction of faulty nodes
K - number of paths
L - number of nodes in each path
Broadcasting on Linear Trees
Pa - probability of anonymity failure.

qA - fraction of adversarial nodes
qF - fraction of faulty nodes
K - number of paths
L - number of nodes in each path
Broadcasting on Linear Trees
Pab - probability of adversarial broadcast-failure.

T - number of slots per epoch
f - fraction of non-epmty slots
α - relative stake of a node
γ - "accuracy" of adversarial inference
q - fraction of observed slots
Inference of Relative Stake
P(s ∈ [α(1-γ), α(1+γ)]) is the prob. that inferred stake, s, belongs to the interval [α(1-γ), α(1+γ)]. Above is adversarial "confidence".


f - fraction of non-epmty slots
α - relative stake of a node
θ - threshold
Pa - probability of anonymity failure.
Pan - prob. that "the number of adver. nodes" >=nA
Linking sending node to a message
t is the number of time slots needed for the prob. of linking sending node to a message to be greater than θ.


Latency

"Noise"