Figure 6: Five networks having the same node degree distribution. (a) Common node degree distribution (degree versus rank on log-log scale); (b) Network resulting from preferential attachment; (c) Network resulting from the GRG method; (d) Heuristically optimal topology; (e) Abilene-inspired topology; (f) Sub-optimally designed topology.
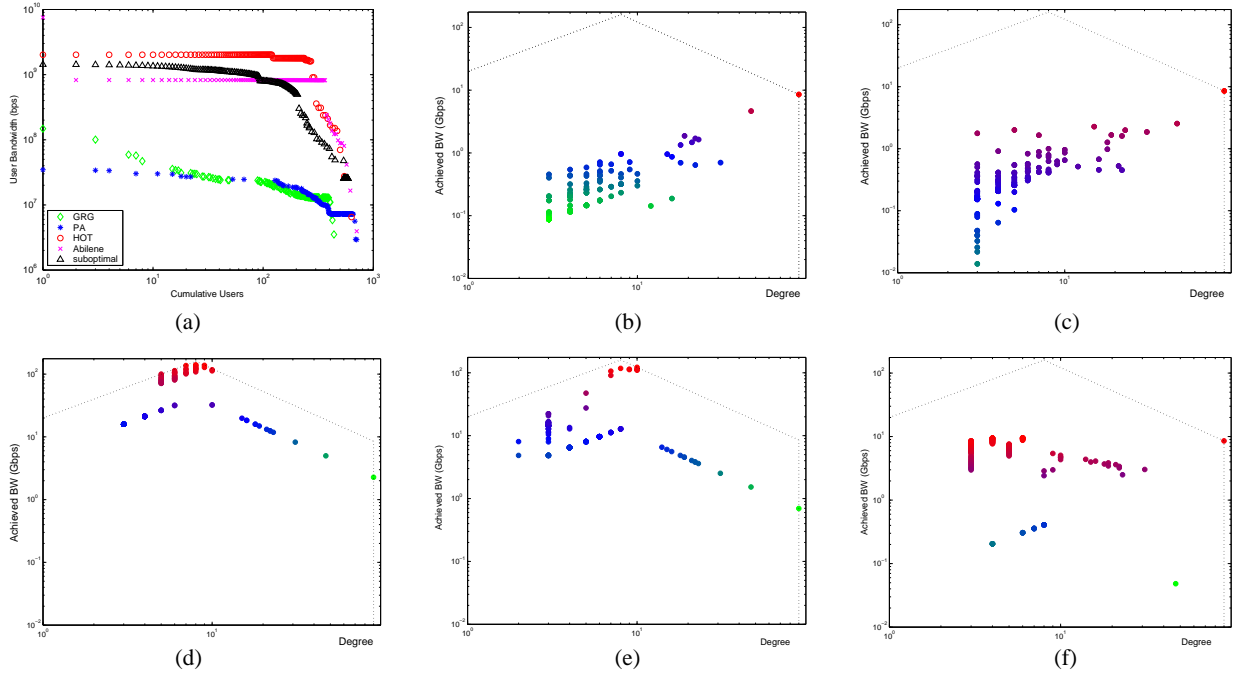

Figure 7: (a) Distribution of end user bandwidths; (b) Router utilization for PA network; (c) Router utilization for GRG network; (d) Router utilization for HOT topology; (e) Router utilization for Abilene-inspired topology; (f) Router utilization for sub-optimal network design. The colorscale of a router on each plot differentiates its bandwidth which is consistent with the routers in Figure 6.