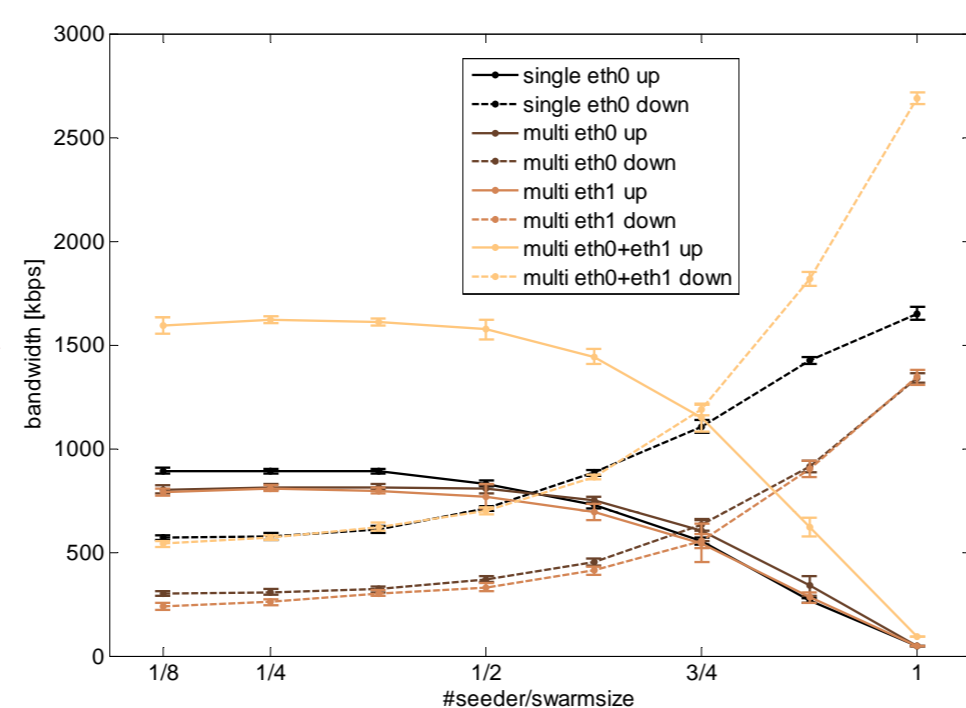
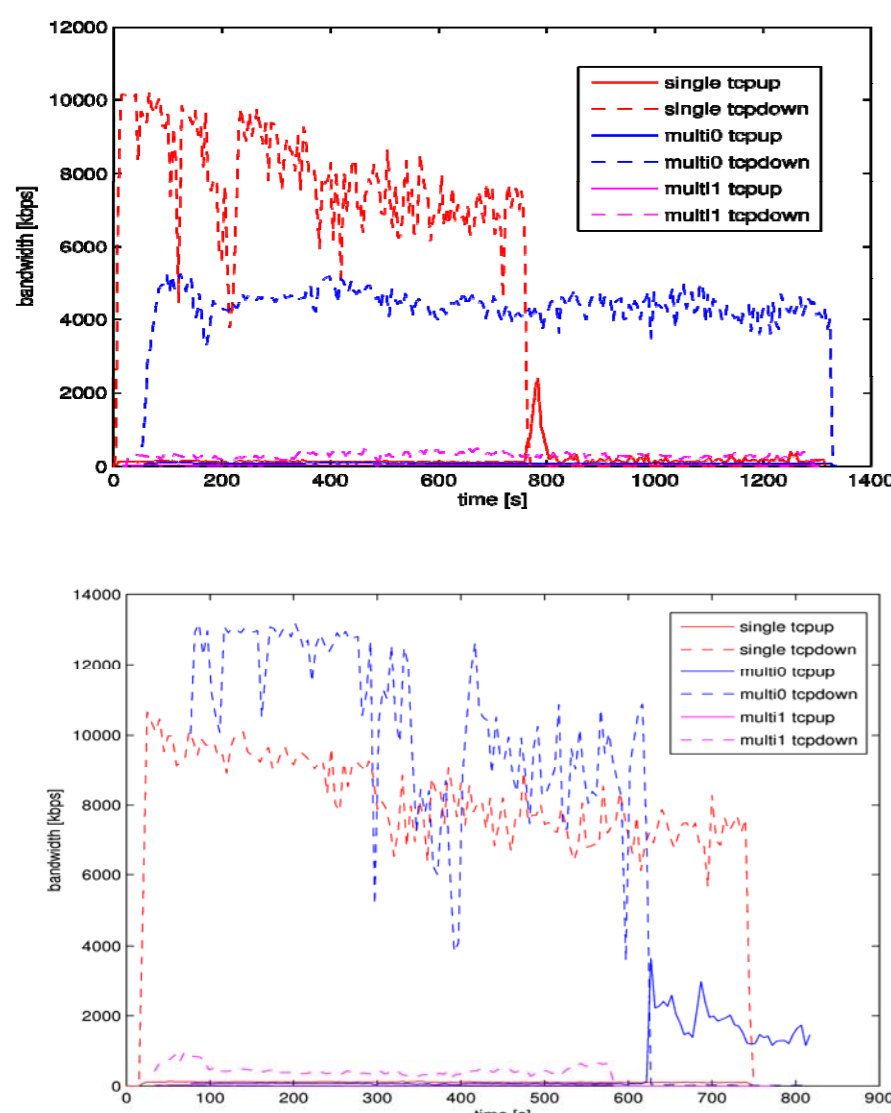


Evaluations in the G-Lab Experimental Facility

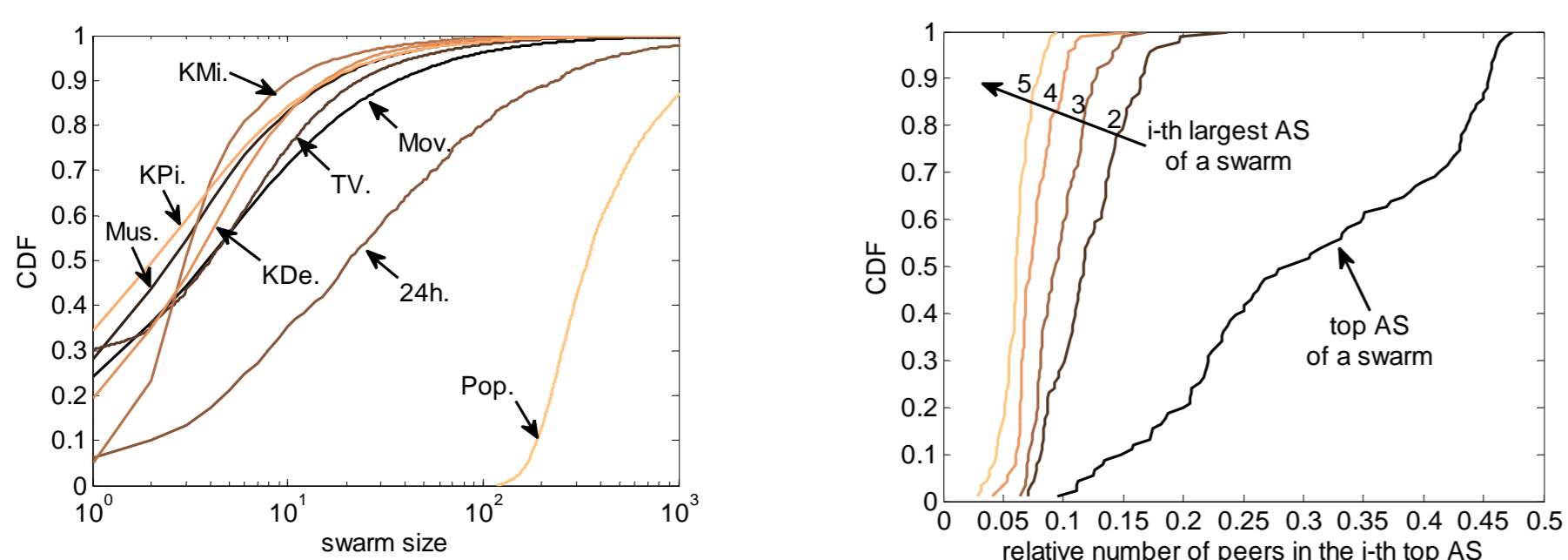
Multi-Homing Experiments



- ▶ Evaluation of the Effect of Multi-Homing of end user devices, e.g., via UMTS and WLAN, on data transfers
- ▶ Observed effects depend strongly on the overlay joined
- ▶ Internet measurements lead to greatly varying results and are not reproducible
- ▶ Measurements in G-Lab lead to statistically valid results
- ▶ Test case for DFG-funded project MobileP2P

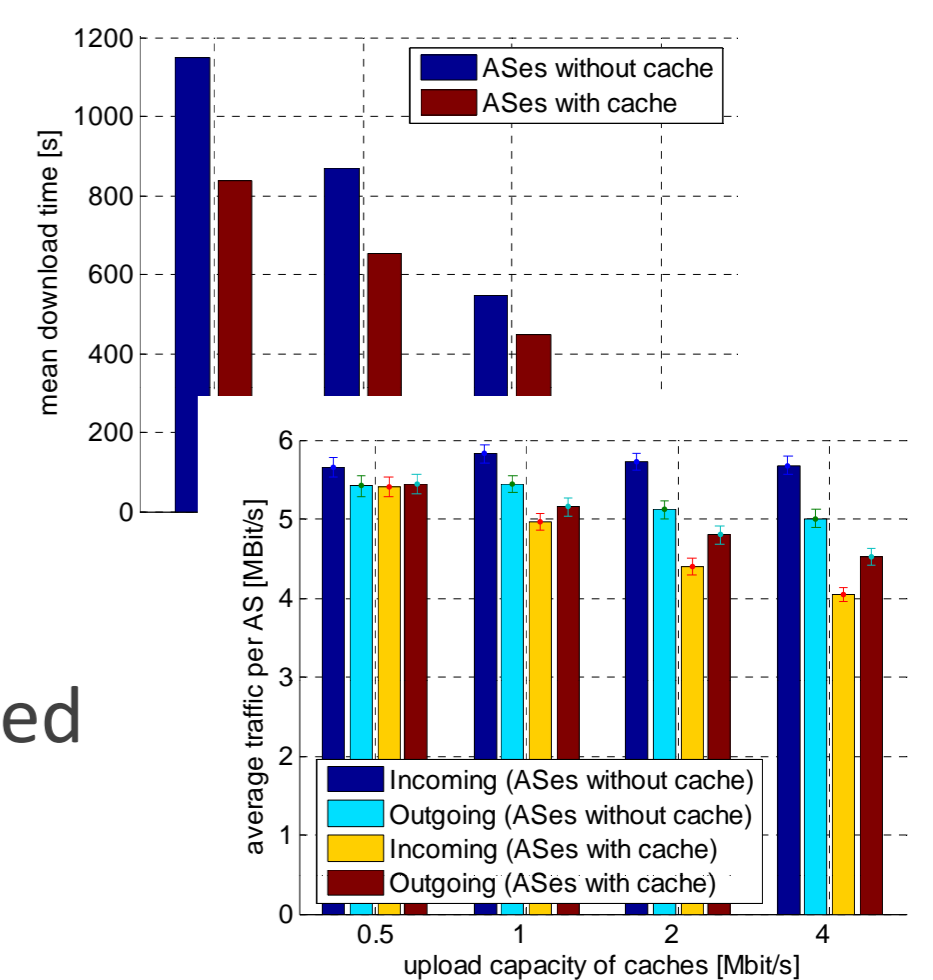
Monitoring of BT swarms

- ▶ Distributed monitoring of trackers
- ▶ Enables modeling and characterization of live swarms
- ▶ Test case for EU FP7 project SmoothIT



Inter-domain Traffic and Caching

- ▶ Adaptation of BitTorrent Client software to implement caching functionality
- ▶ Experiments and Measurements in an emulated BT swarm
- ▶ Test case for EuroNF funded project ISPeer



Why G-Lab?

- ▶ Performance measurements in the real Internet are not reproducible and therefore not significant
- ▶ G-Lab allows for a realistic environment but with controllable scenarios
- ▶ Evaluation of the most important parameters is enabled
- ▶ G-Lab allows for an implementation of real protocols, e.g., Caches, Streaming Clients, etc.
- ▶ Delay, bandwidth, realistic signaling,... are all included in the evaluation
- ▶ Complements scalable, but abstract (flow-level) simulations