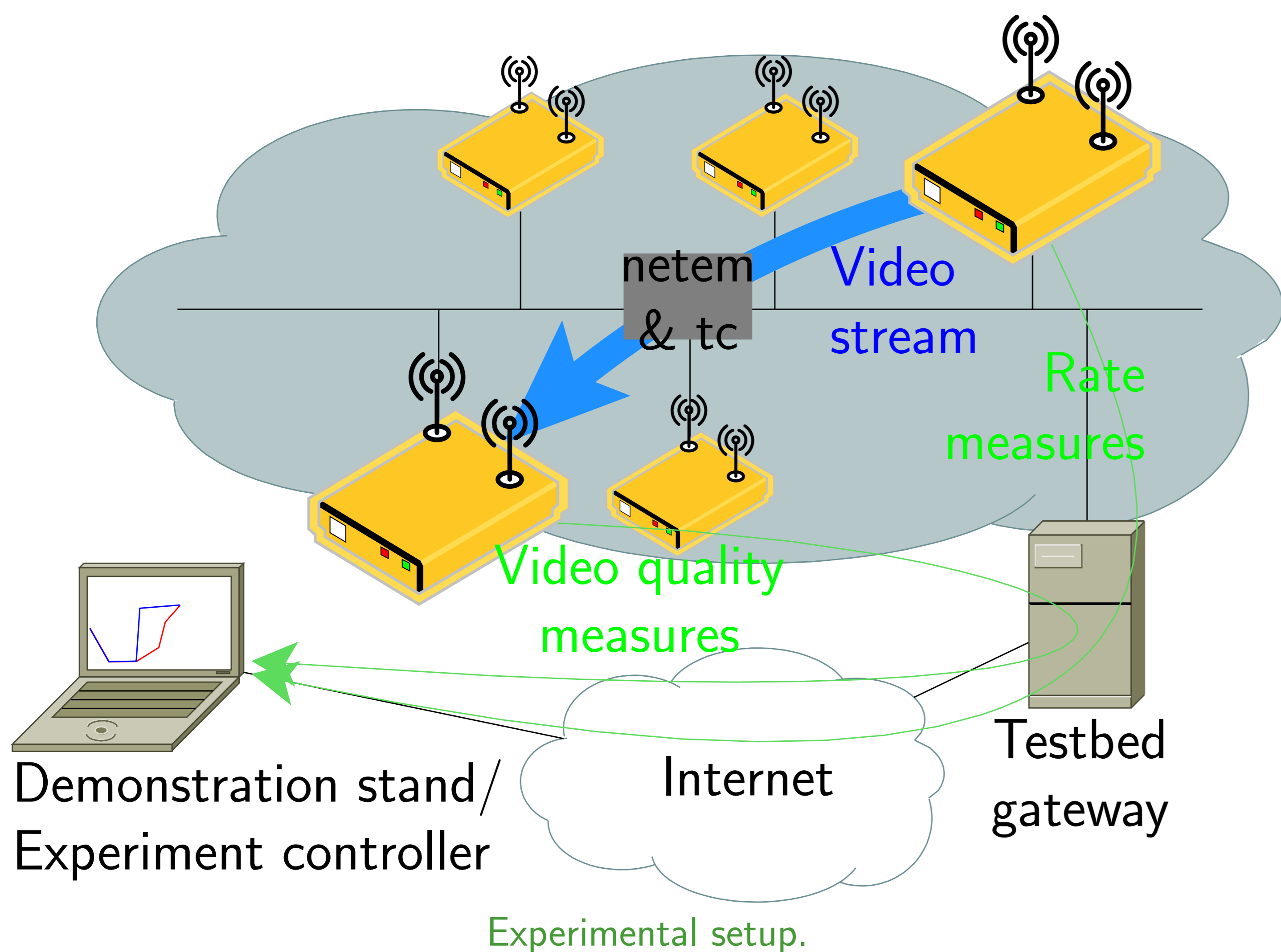
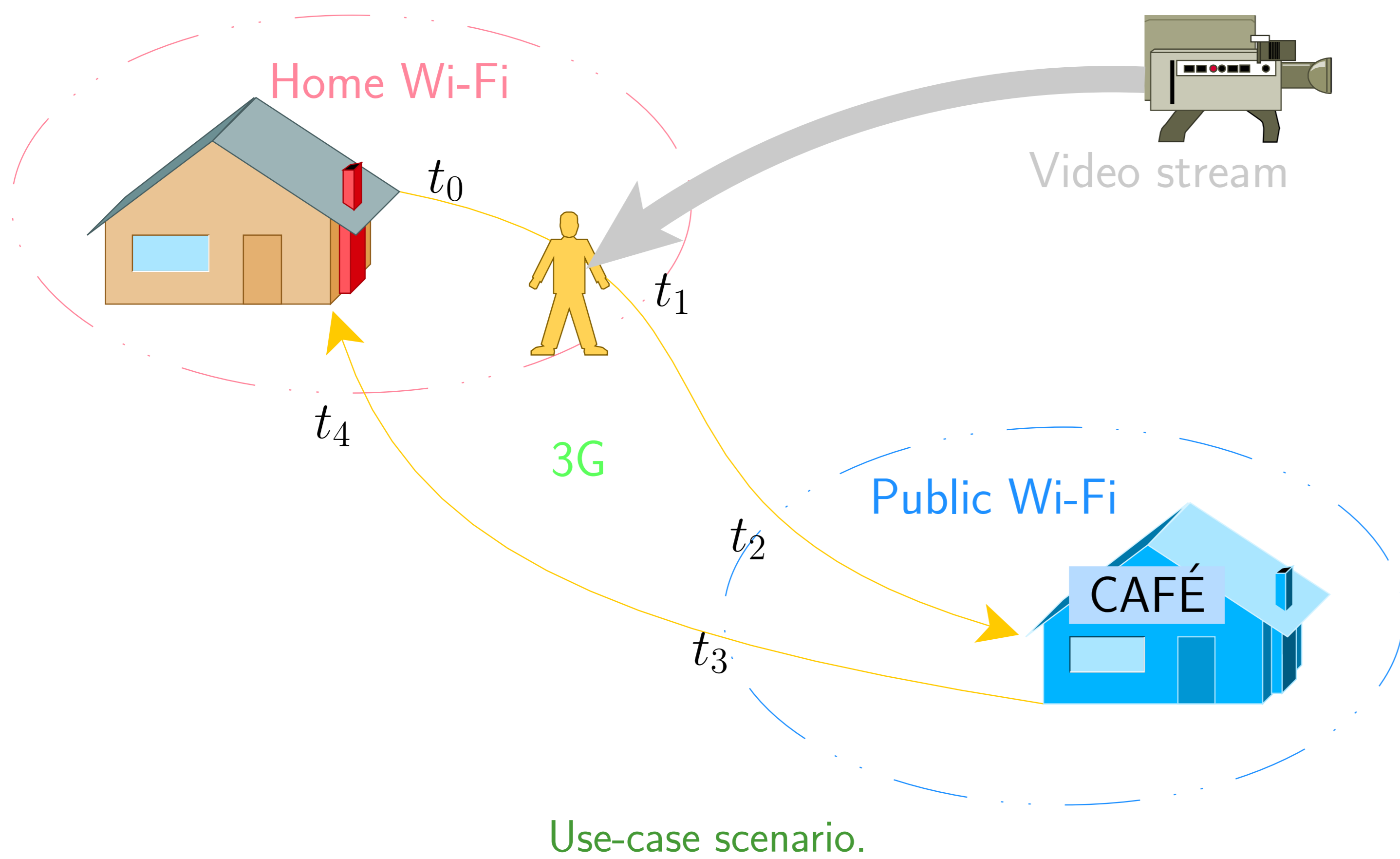


Mobile Multimedia Streaming Improvements with Freeze-DCCP



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Reproducible experimental evaluation facilitated by experimental framework



Mobility-aware Transport and Experimental Testbed

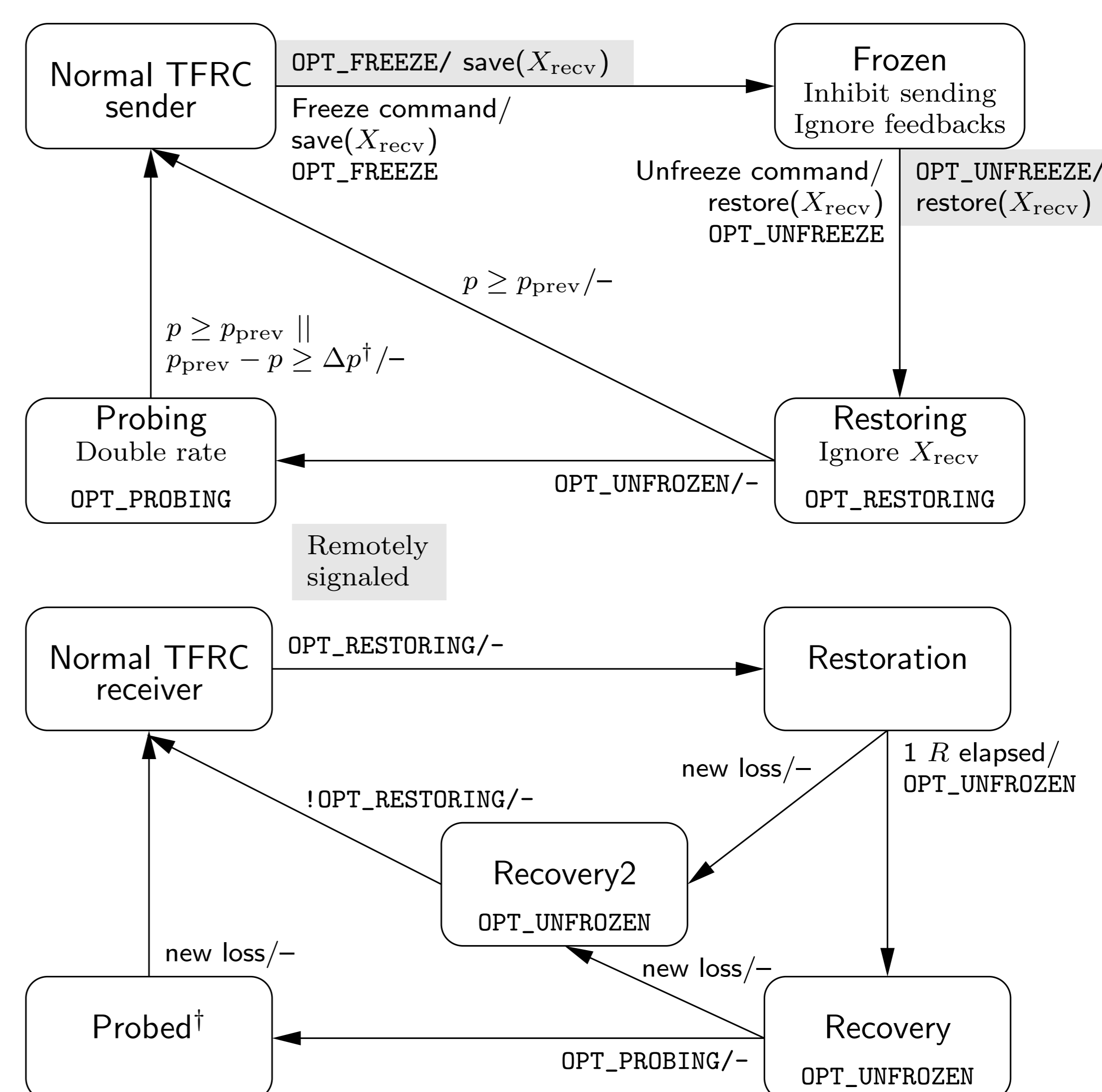
- Freeze-DCCP extends TFRC to support mobility-induced disconnections without unnecessary rate reduction
- Experiments run on the OMF-based Norbit testbed
- Specific bandwidths and delays are emulated using Linux' netem and tc
- Results are collected using the OML library for live display and later analysis

Mobile Video Streaming

1. At home, a user starts watching a video over their home Wi-Fi
2. They go to the coffee shop and switch to 3G connectivity
3. The coffee shop offers a public Wi-Fi access point
4. On the way home, the 3G connection is used again
5. Back at home, the stream switches back to Wi-Fi

Projects Contributions

- Freeze-DCCP kernel implementation for Linux completed
- OMF Testbed Management Framework 5.3 released for reproducible experiments and testbed federation
- OML client library 2.4 for instrumentation of experimental and reporting tools



†When a packet is lost, the receiver computes and reports a p equivalent to the currently observed X_{recv} .

Freeze-DCCP/TFRC sender and receiver operation.

From imagination to impact