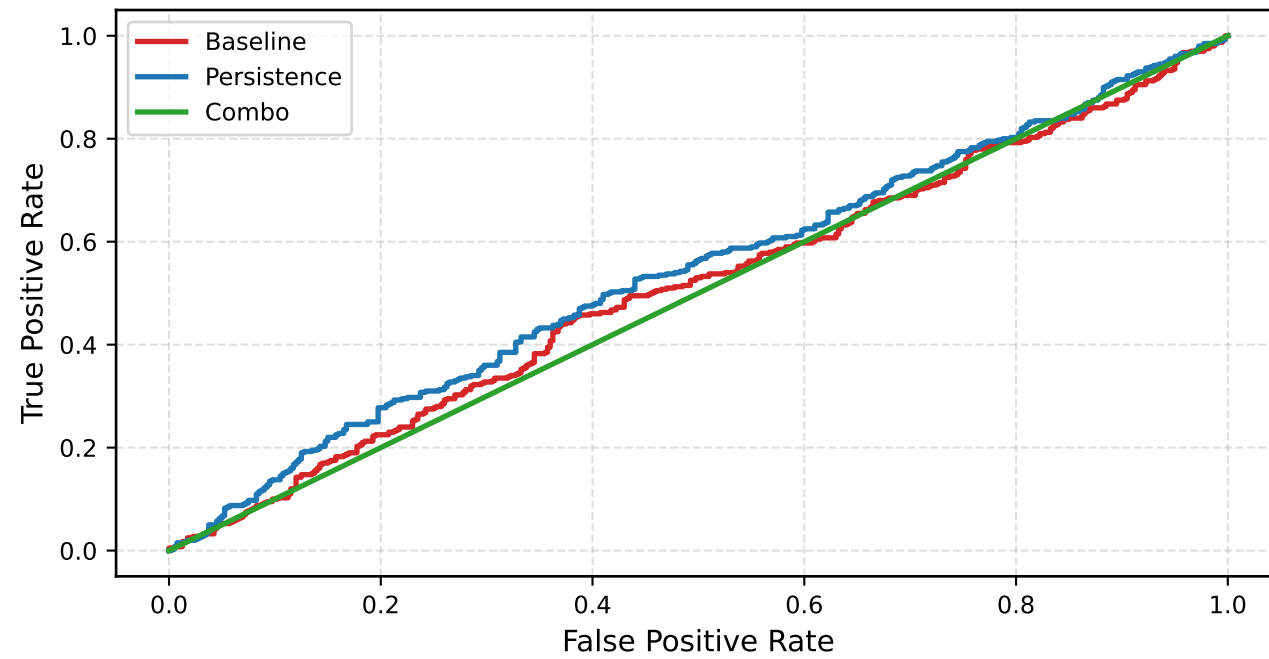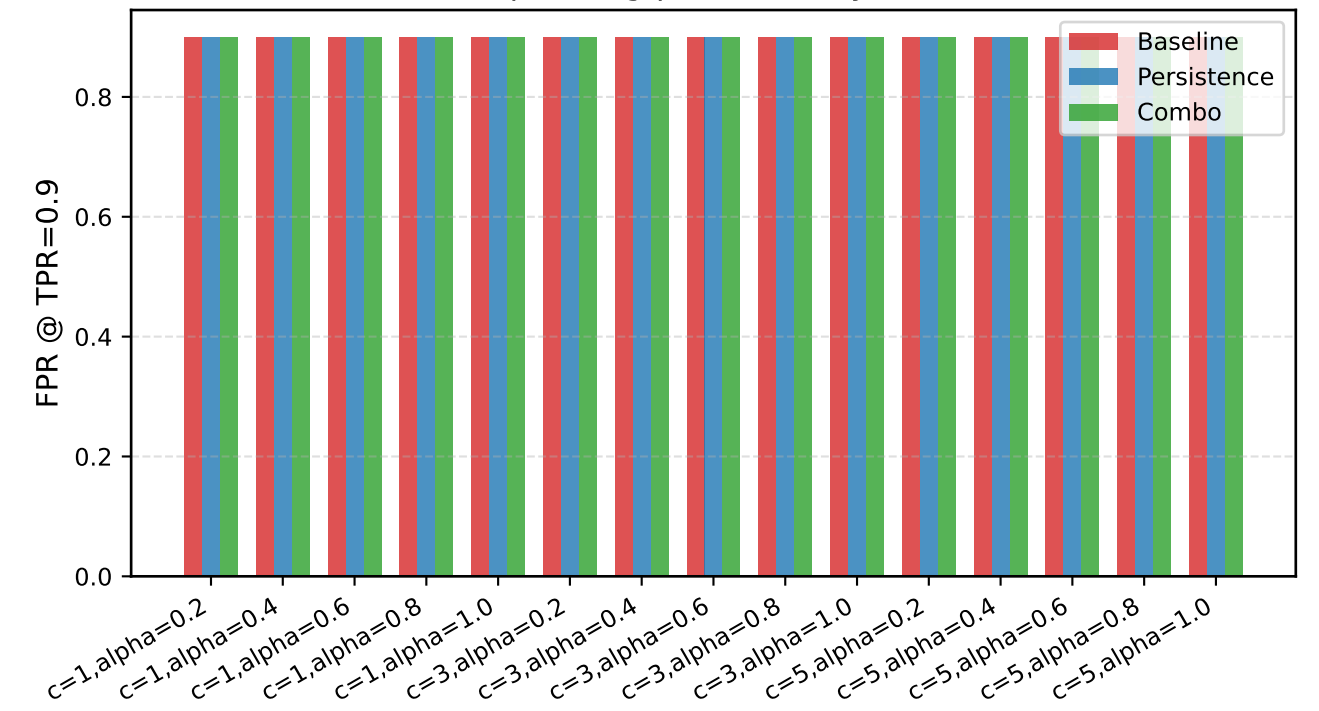**Panel 11 – Fake spikes vs persistence defenses**
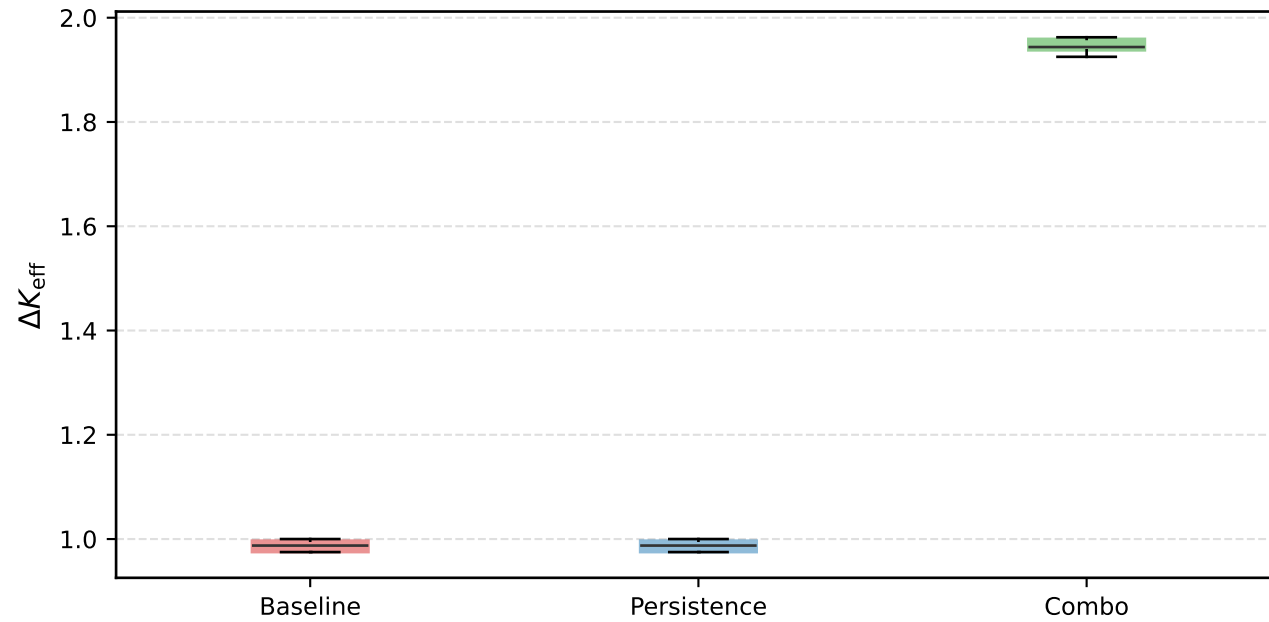
11A) ROC – attack detection

11B) Operating-point FPR (by scenario)

11C) Effective rank error

11D) Cross-shard score S_t