

Location-based Wi-Fi Services (LoWS)

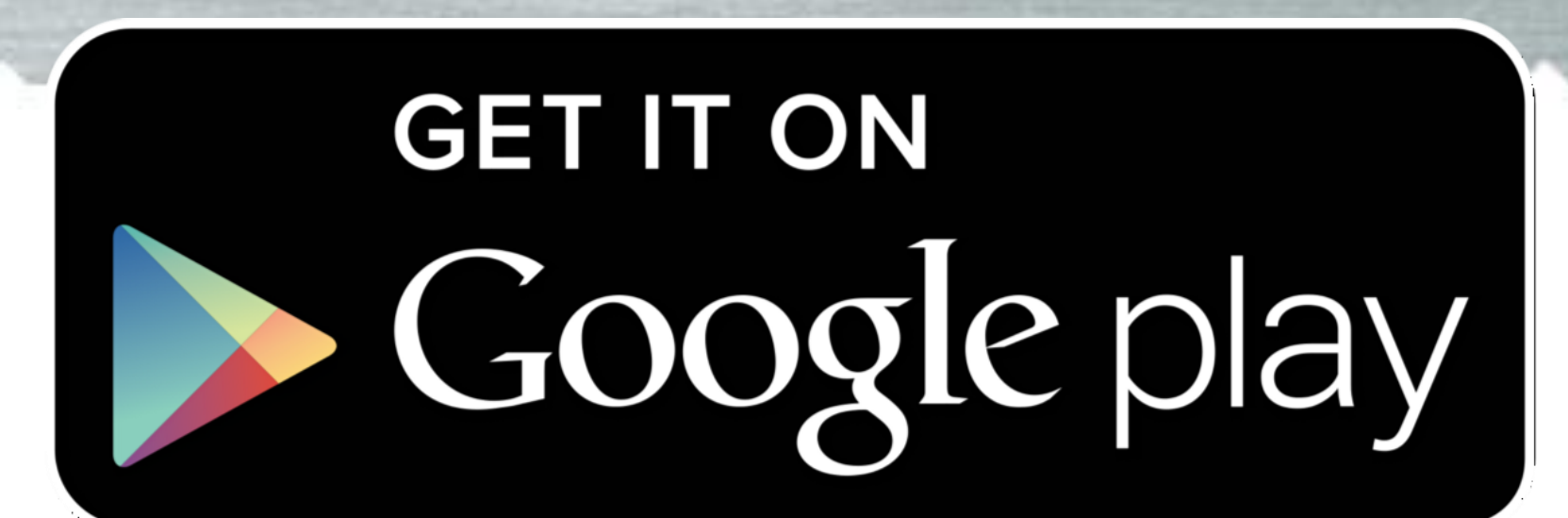
Mobicom 2017 Conference Program Information Service



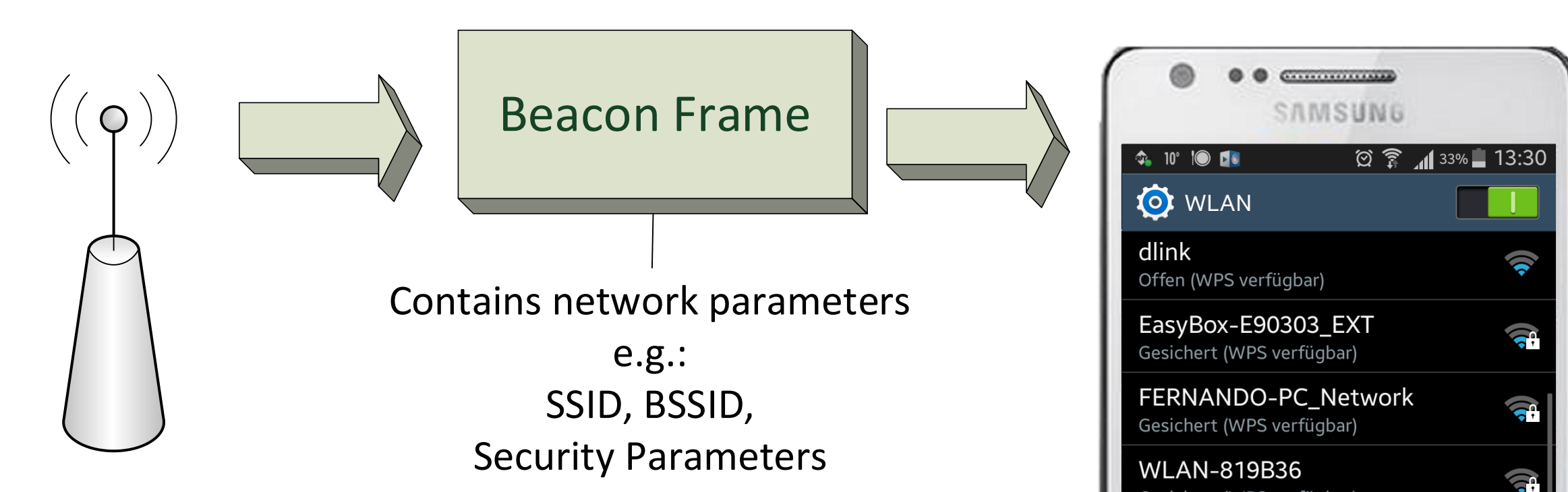
Sven Zehl, Anatolij Zubow and Adam Wolisz
{zehl, zubow, wolisz}@tkn.tu-berlin.de
Department of Telecommunication Systems, Technische Universität Berlin



Download our Location-based Wi-Fi Service (LoWS) app and receive the Mobicom 2017 conference program live over-the-air without Internet connection!

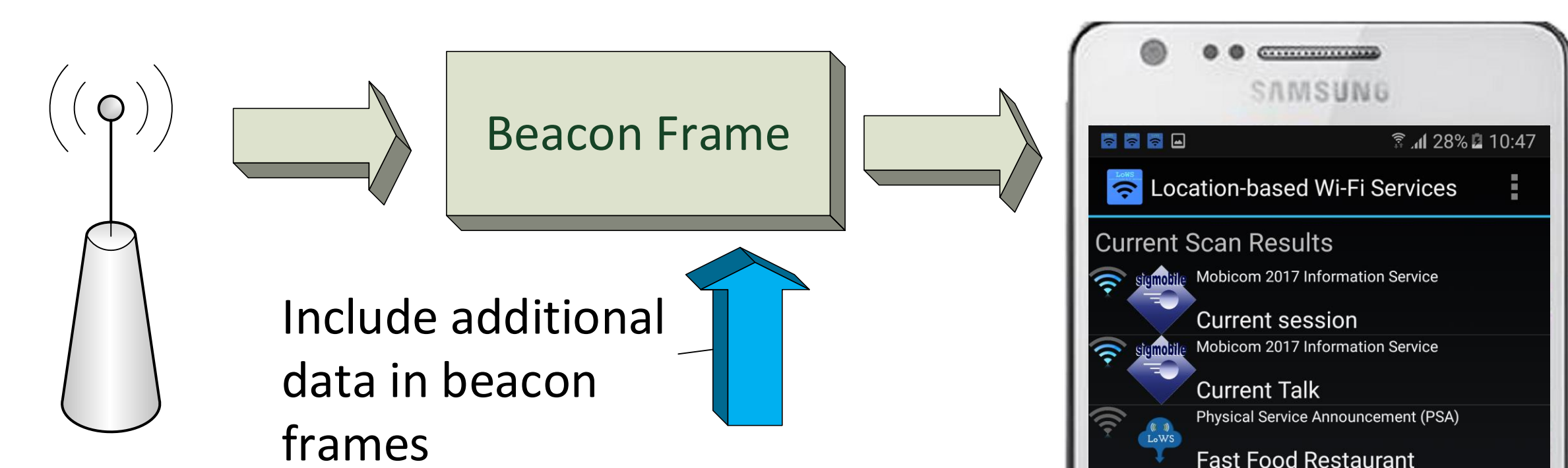


How does it work?

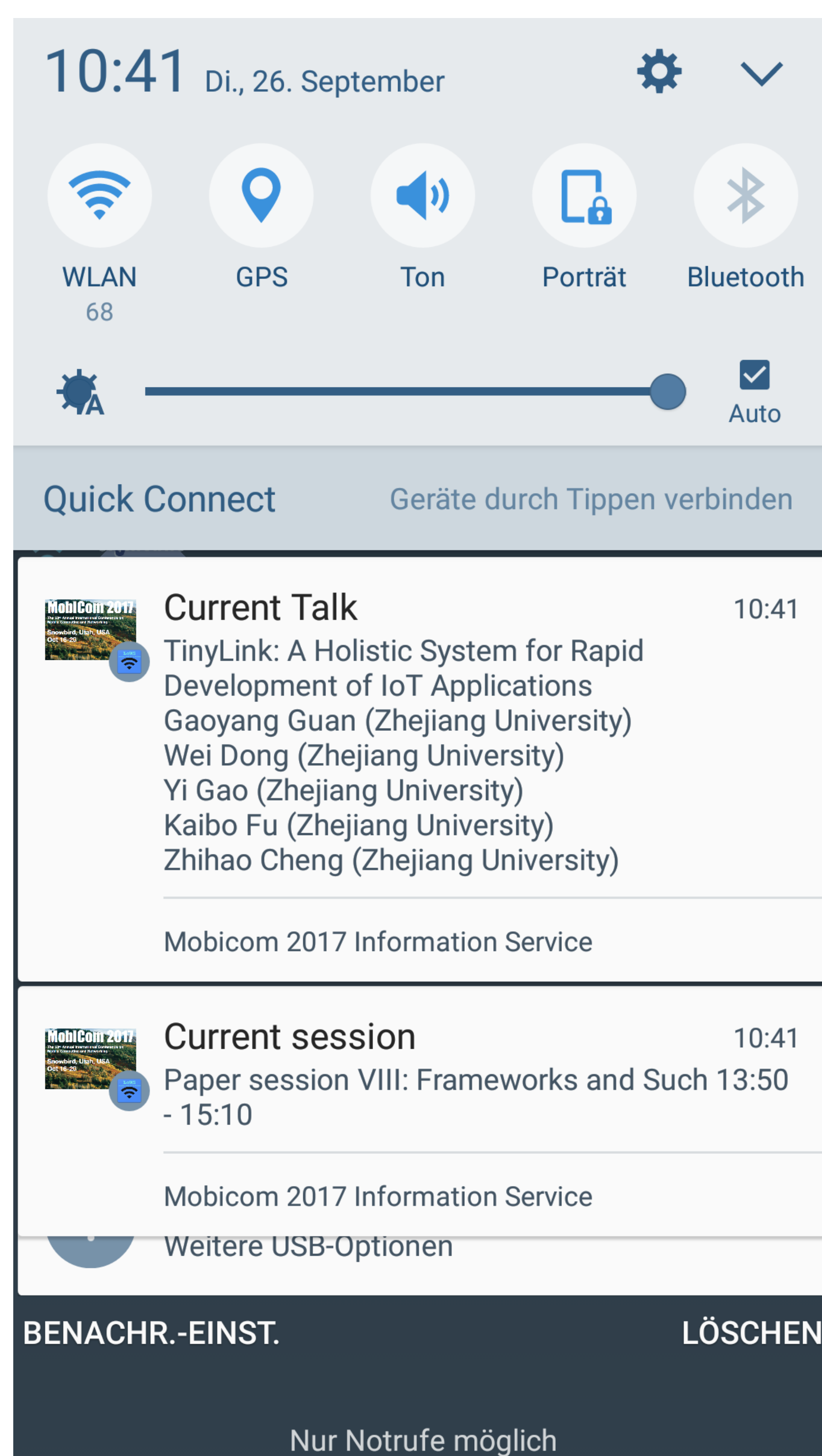


- To enable Wi-Fi clients to discover Wi-Fi APs in their vicinity, IEEE 802.11 APs are announcing their presence by broadcasting beacon frames.
- Client devices receive beacon frames through automatically triggered background scans.

Wi-Fi Beacon Stuffing: Exploit Beacon Frames to transport Location-based Service Data!



- Using Wi-Fi beacon stuffing enables to transmit location-based information from Wi-Fi AP to Wi-Fi client without the requirement of:
 - Clients to associate
 - Clients to have Internet access
 - Clients sharing their location information
 - Any additional hardware or software for clients and APs!



Don't miss our **interactive LoWS demonstration** (Fire Emergency, Over the air advertisements, etc.) on **Tuesday October 17, 5:35pm, Primose Room, Level C !**