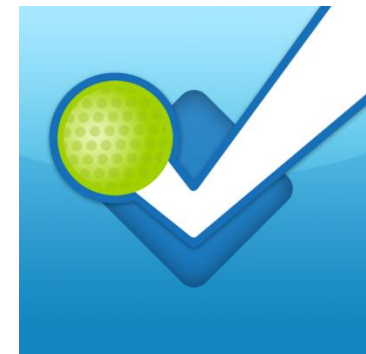
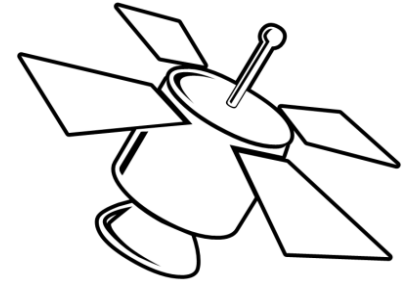
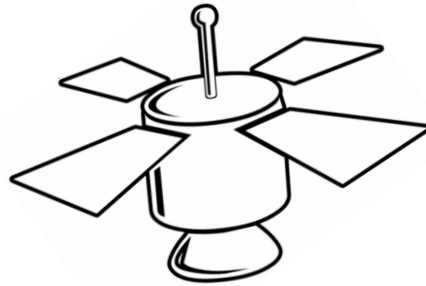
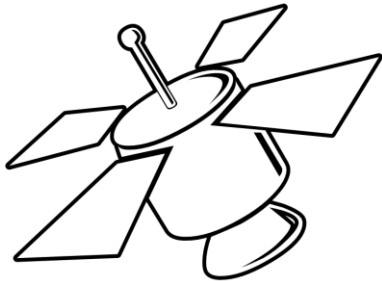
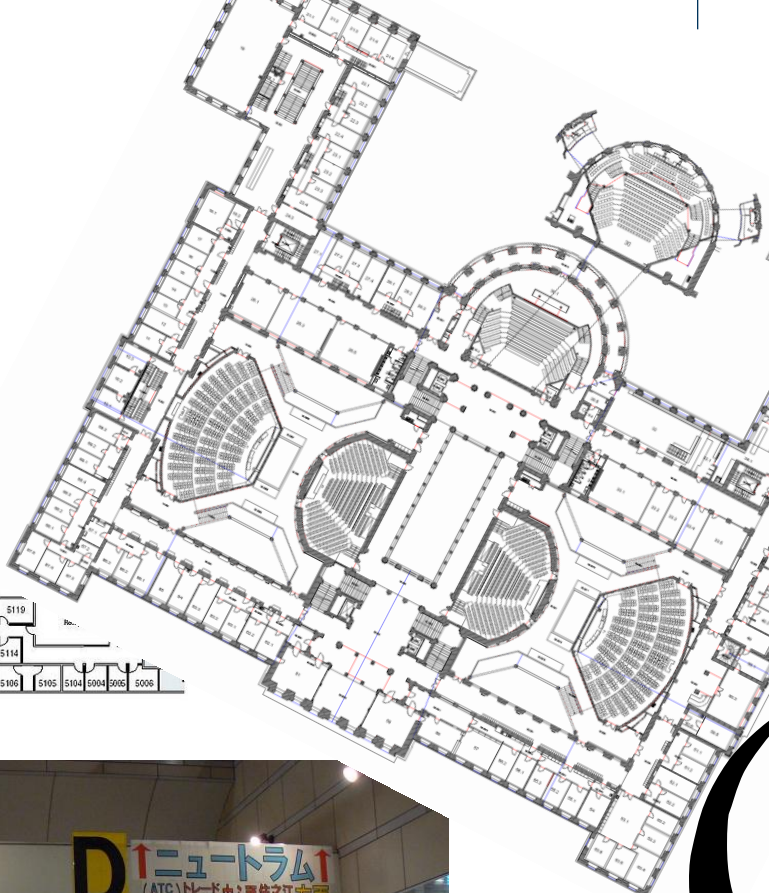


The Pocket Guide to Indoor Mapping

Pascal Bissig
Prof. Dr. Roger Wattenhofer
Samuel Welten

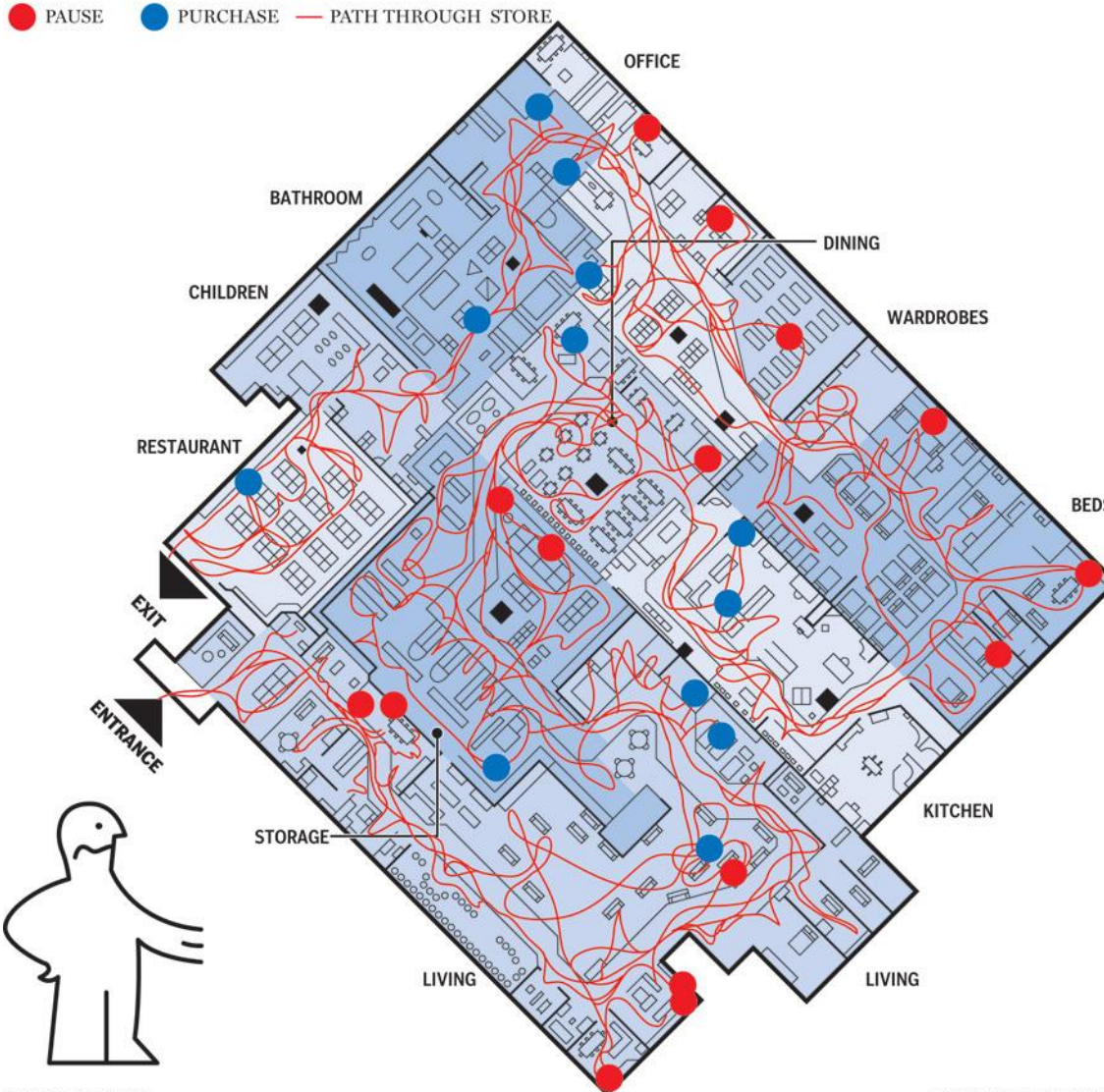






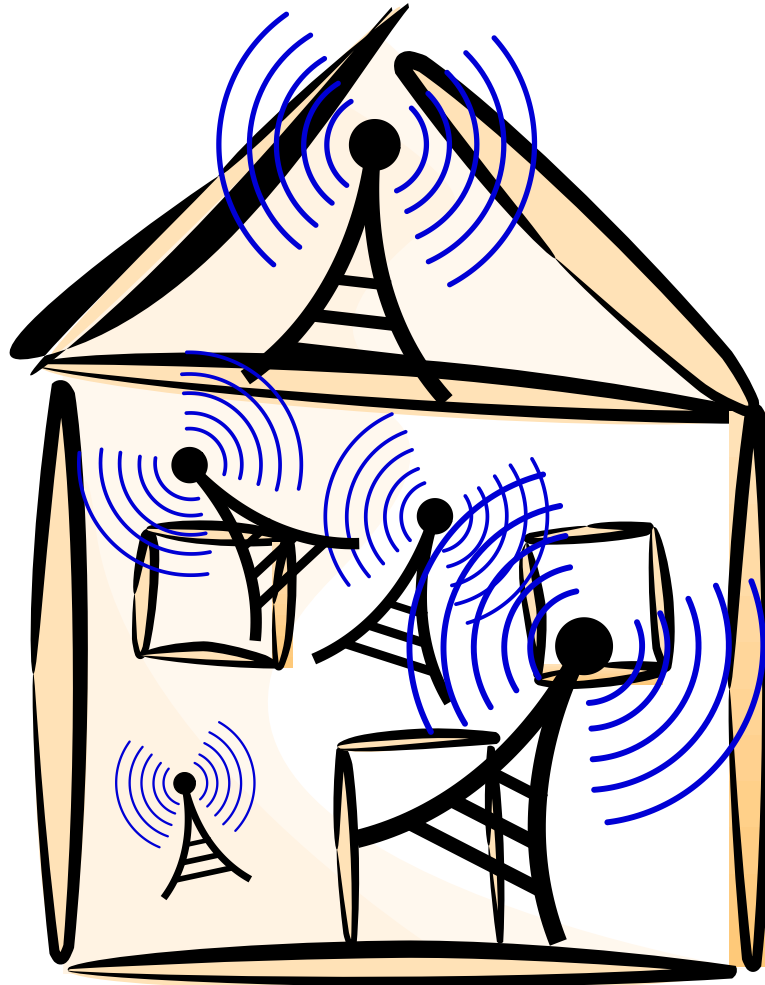
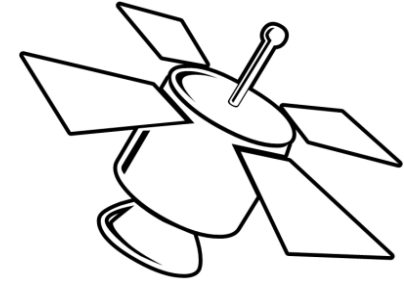
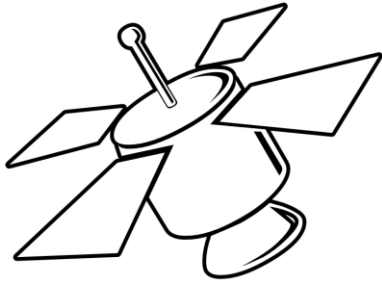
IKEA: SWEDISH FOR “MAZE”

A customer’s path through IKEA is a sinuous one. Eight IKEA shoppers were followed through a London IKEA in 2004. Here are their sinuous paths, as recorded by Farah Kazim, a former University College London graduate student.

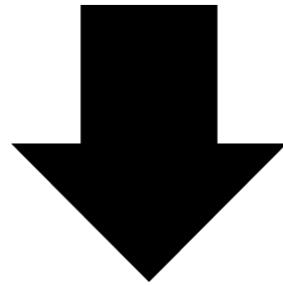


SOURCE: DAILY MAIL

JONATHON RIVAIT / NATIONAL POST



Spatial signal strength distribution



Localization

How easy can we build signal strength maps?

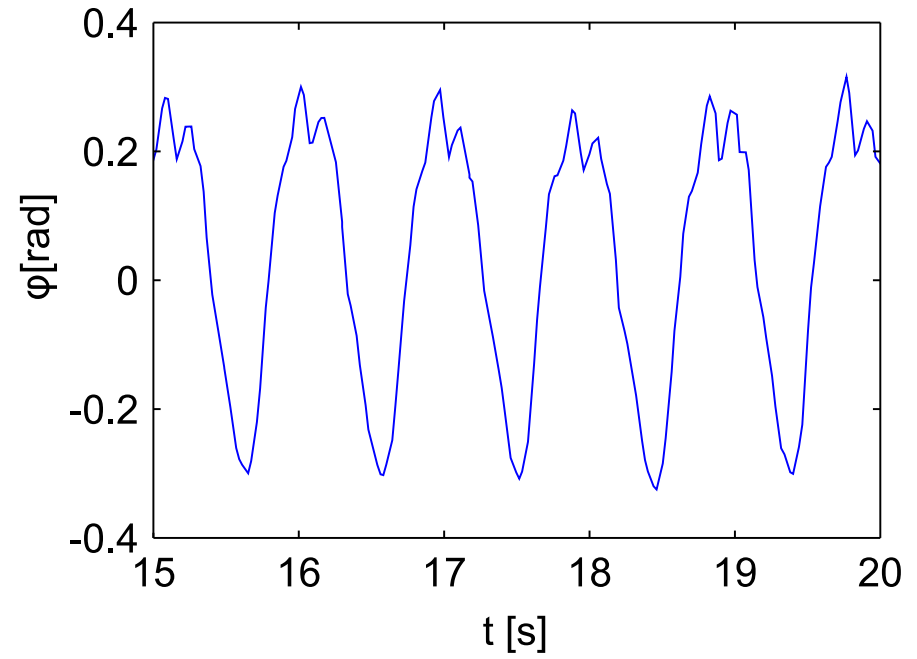
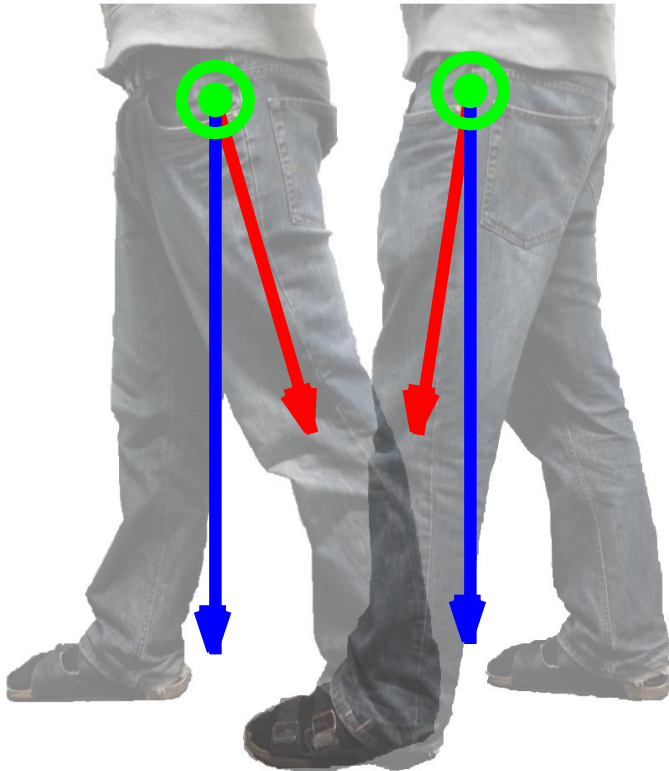


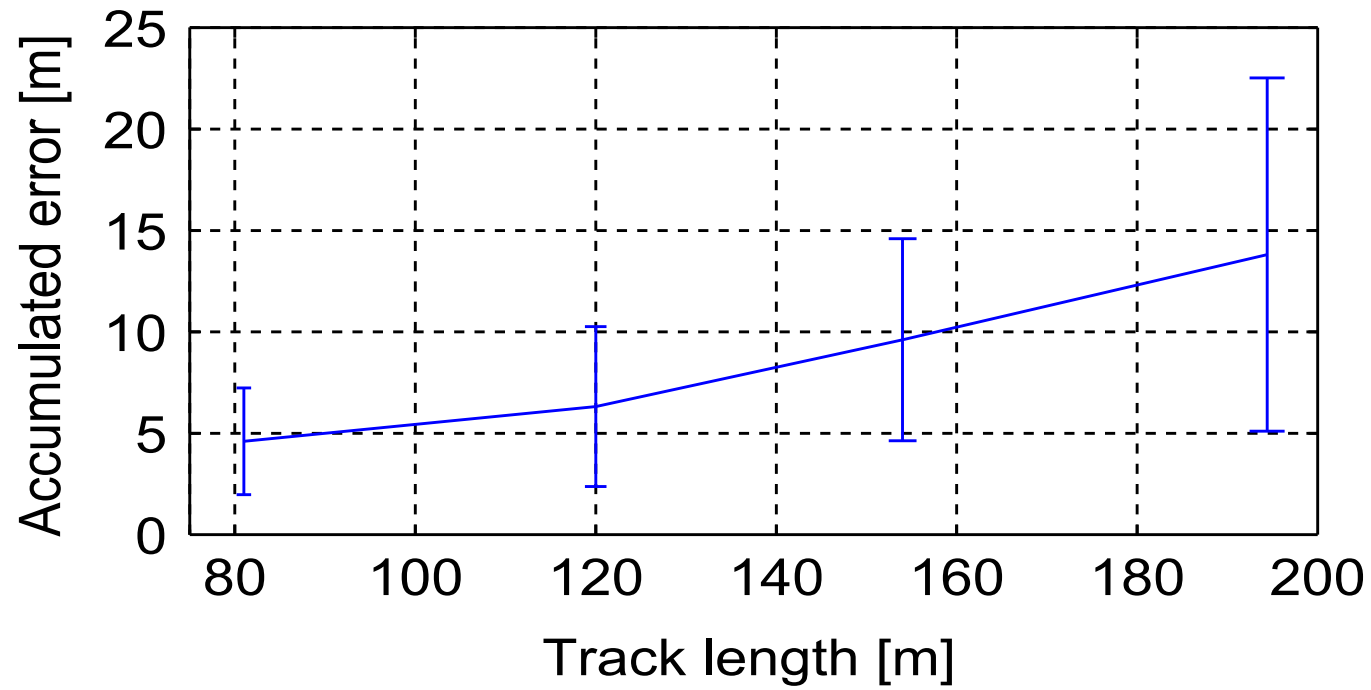
Image source: <http://googlediscovery.com>

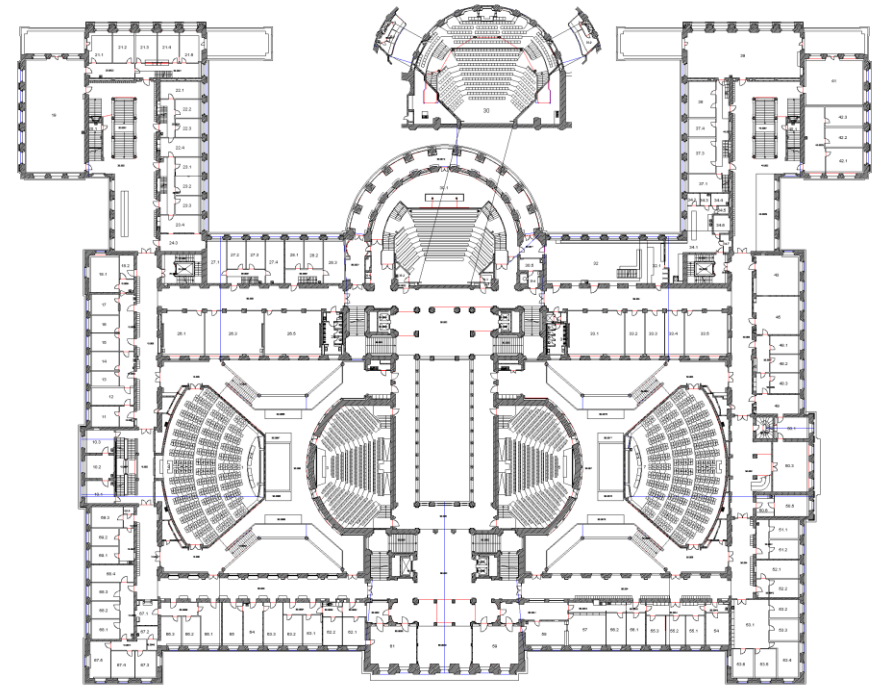
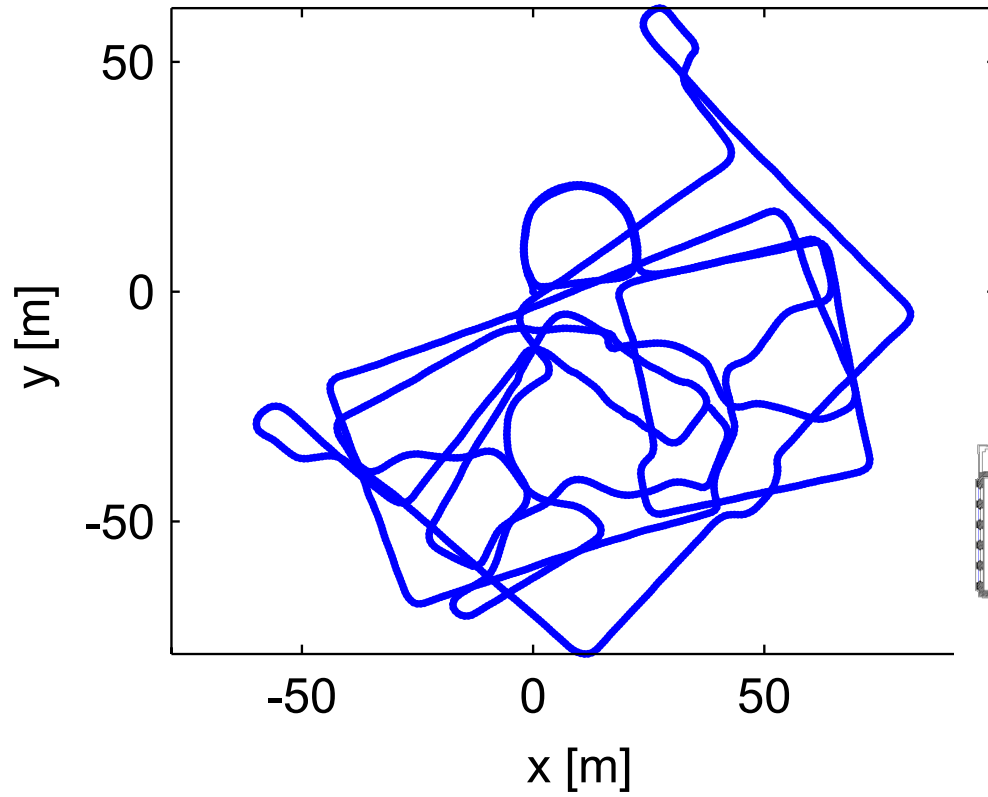


- **WiFi**
- Bluetooth
- Mobile Internet
- GPS
- **Accelerometer**
- Magnetometer
- **Gyroscope**
- Camera
- Microphone
- Light sensor

Motion



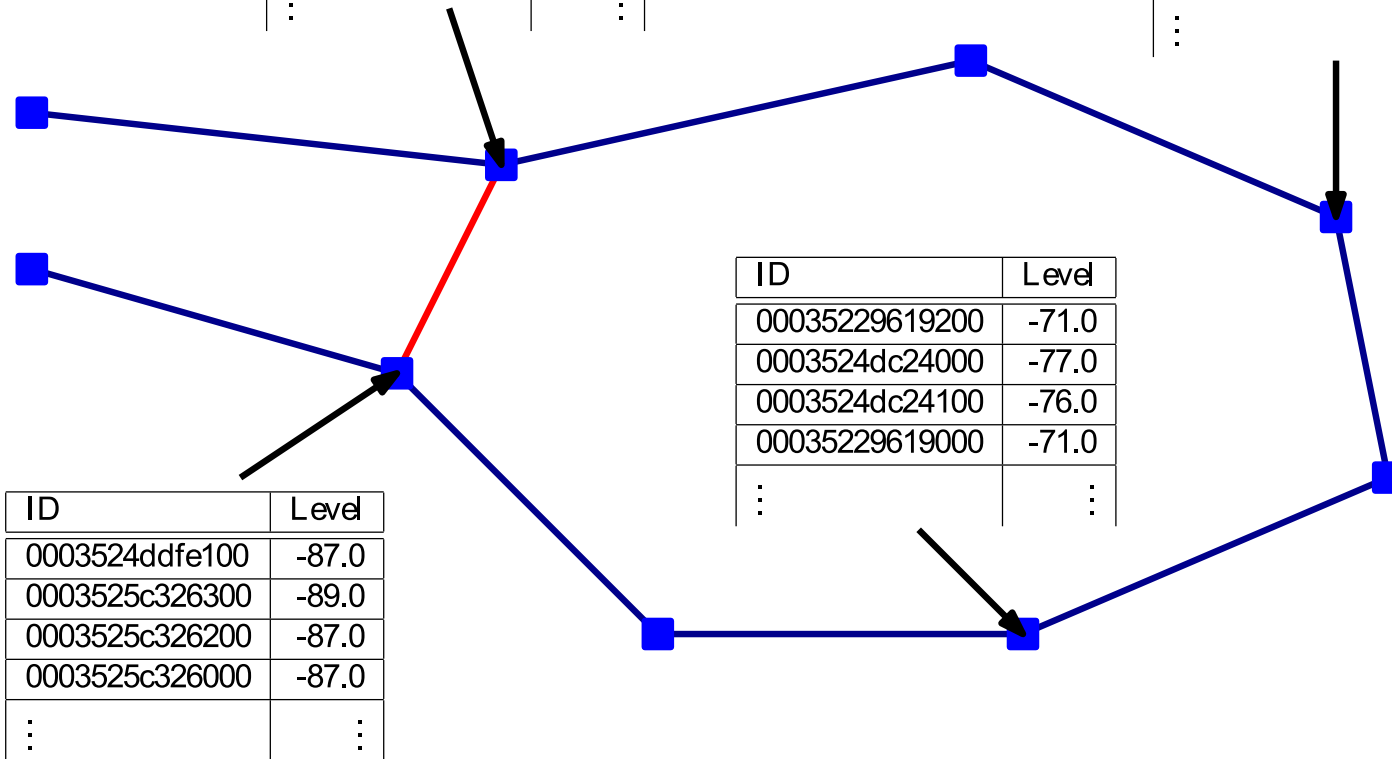




Association

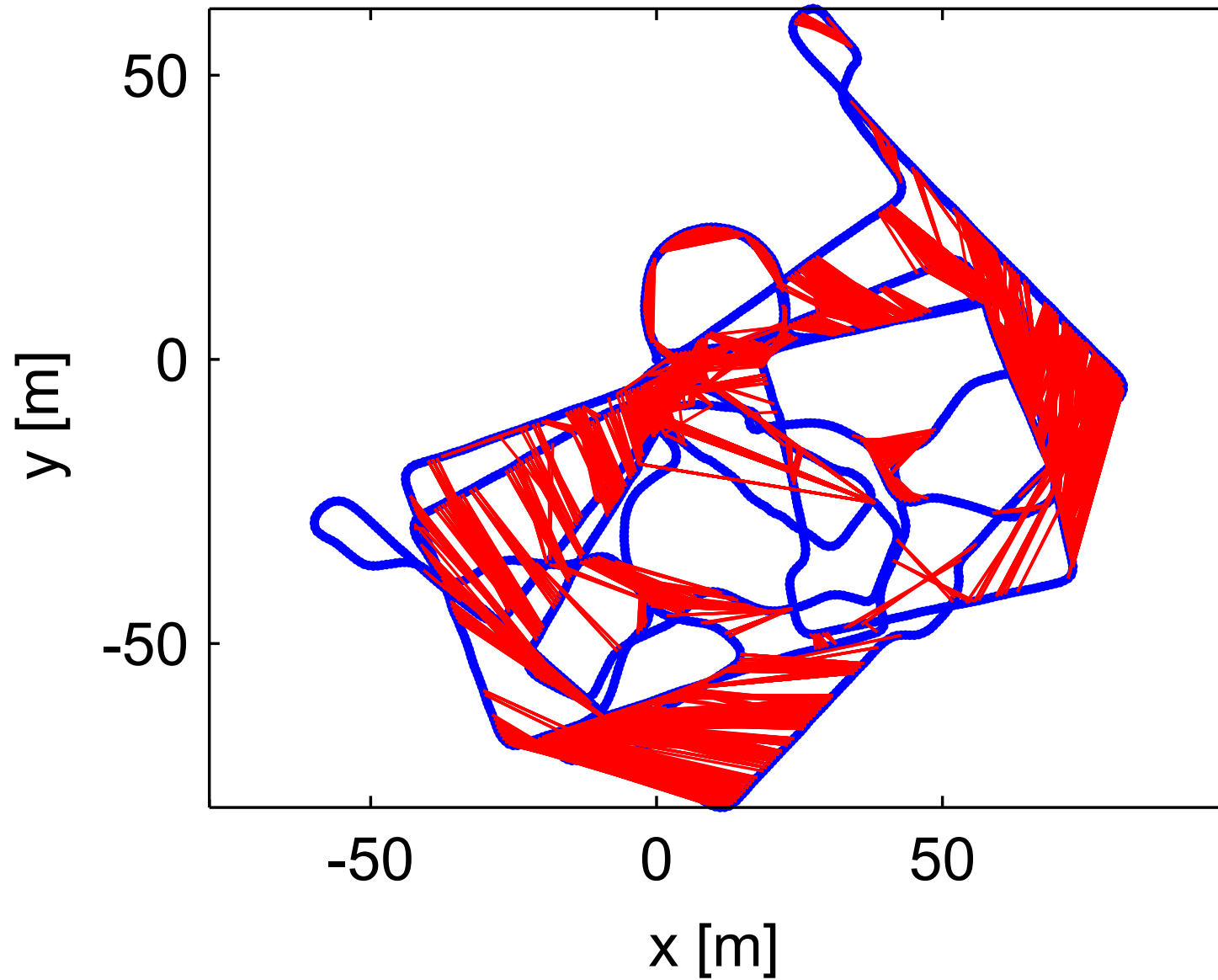
ID	Level
0003524ddfe100	-87.0
0003525c326300	-89.0
0003525c326200	-87.0
0003525c326000	-87.0
⋮	⋮

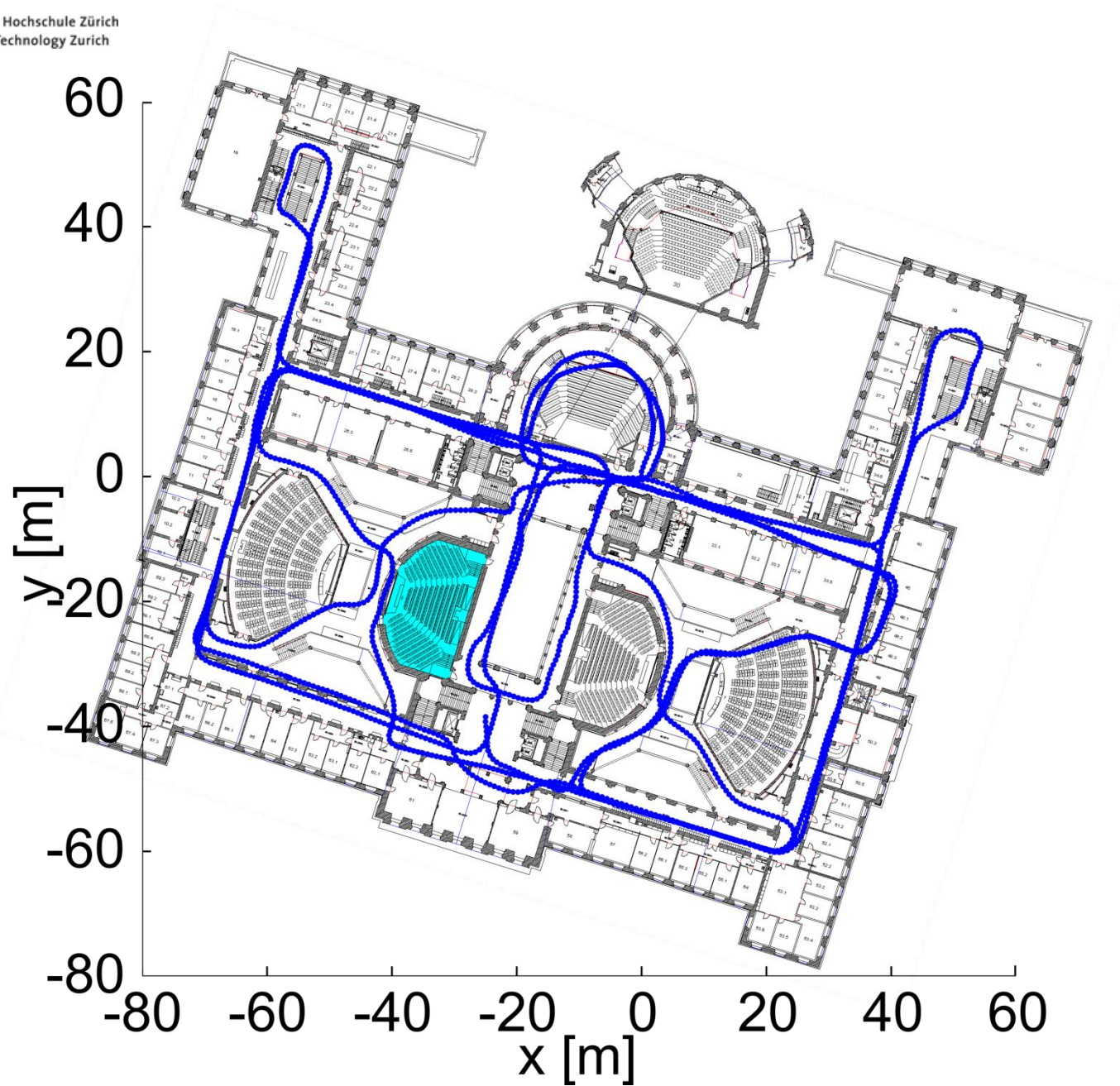
ID	Level
00035229619200	-71.0
0003524dc24000	-77.0
0003524dc24100	-76.0
00035229619000	-71.0
⋮	⋮



ID	Level
00035229619200	-71.0
0003524dc24000	-77.0
0003524dc24100	-76.0
00035229619000	-71.0
⋮	⋮

Fusion





Thank you for your attention

Questions?

