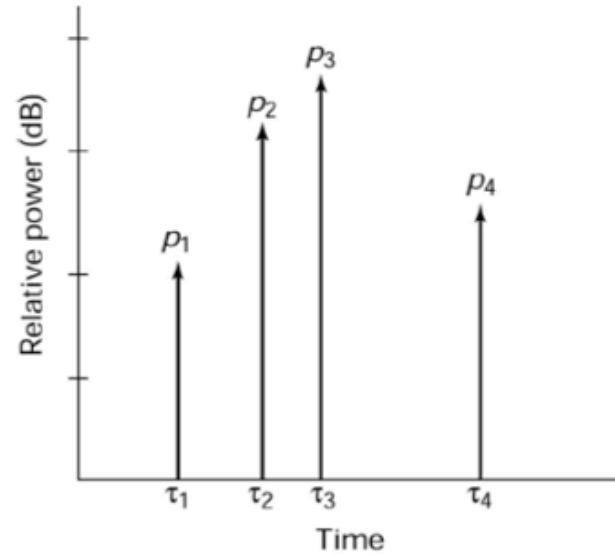


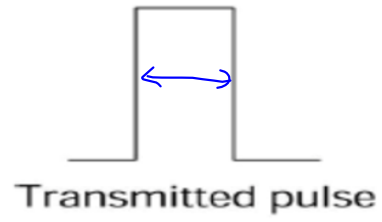
component.



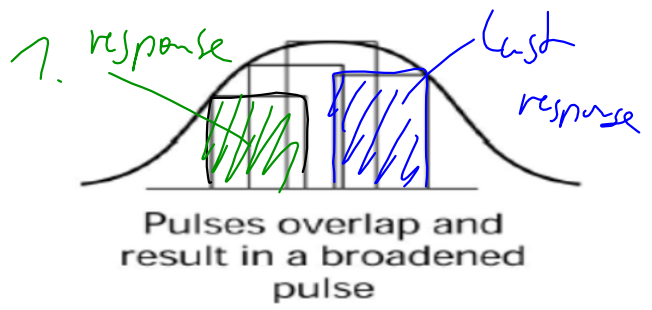
UNIK4700

time/freq domain

* Envelope of the overlapping pulse showed a broadened pulse – leads to intersymbol interference (ISI)

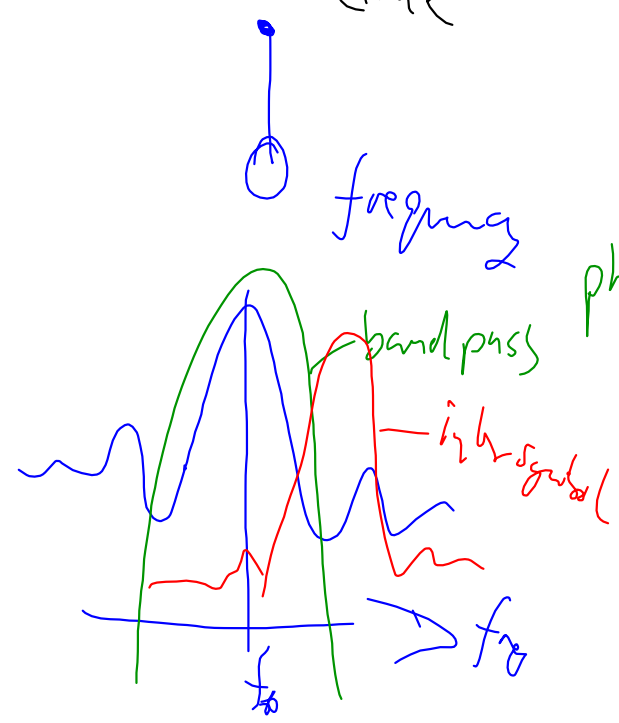


time

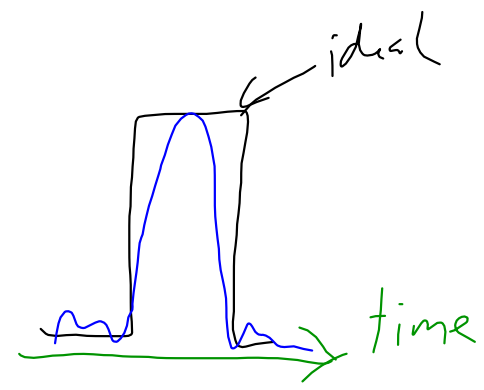


time

- always cite
 [Kinoshita 2017]
 [1]
 - Page numbers



physical system



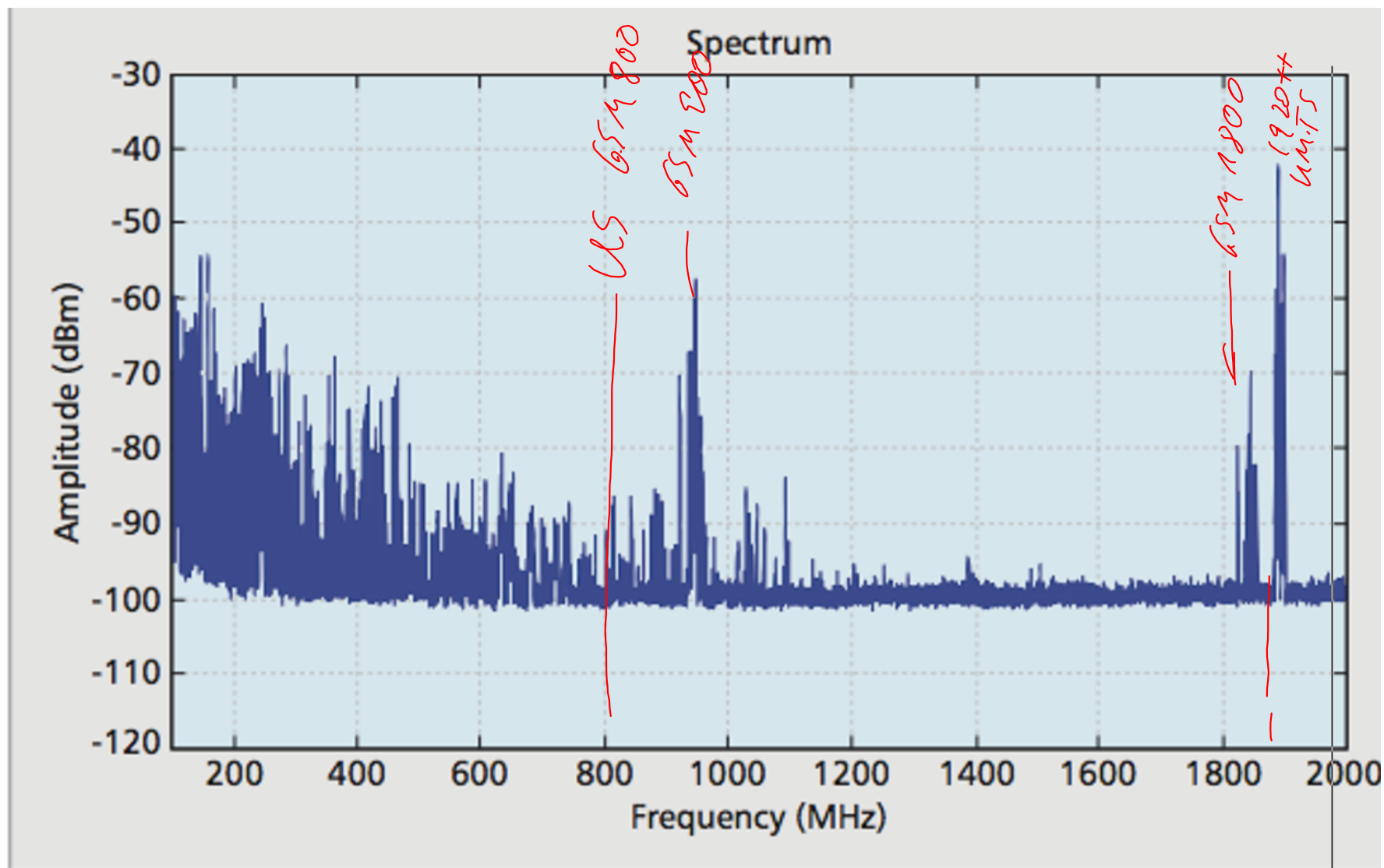


Figure 1. *Electromagnetic interference measured in a boiler house.*

6

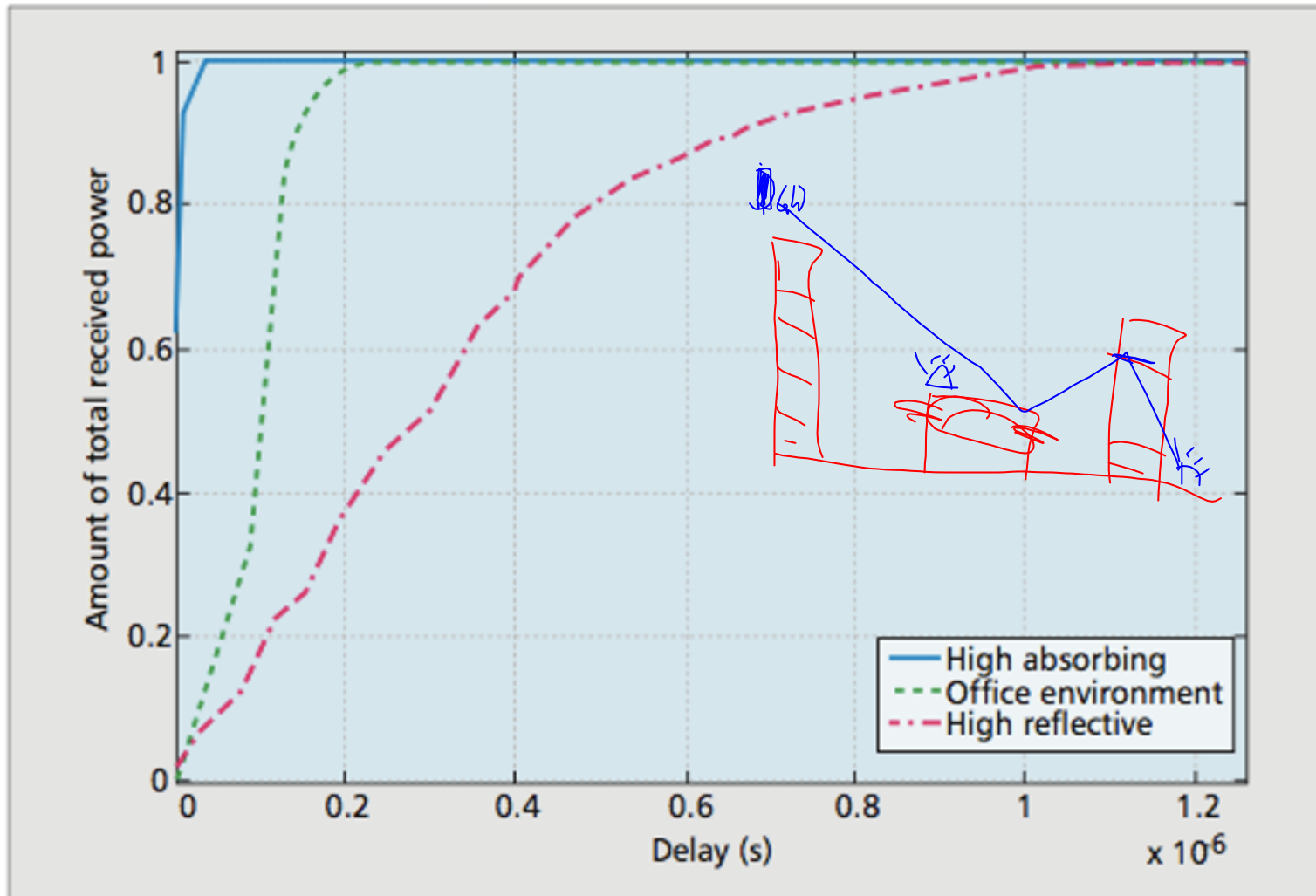
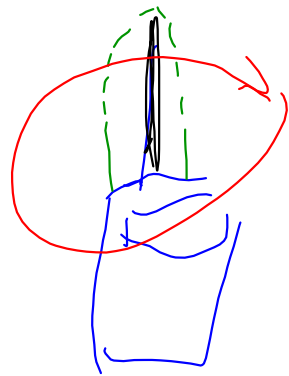


Figure 3. Cumulative distribution function in highly absorbing, office, and highly reflective environments, NLoS case.

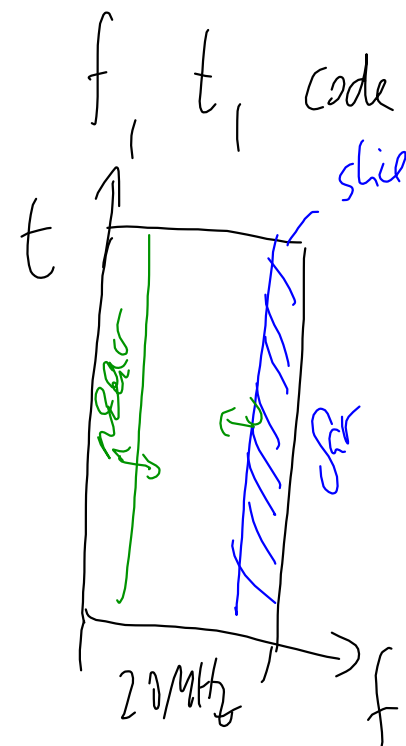
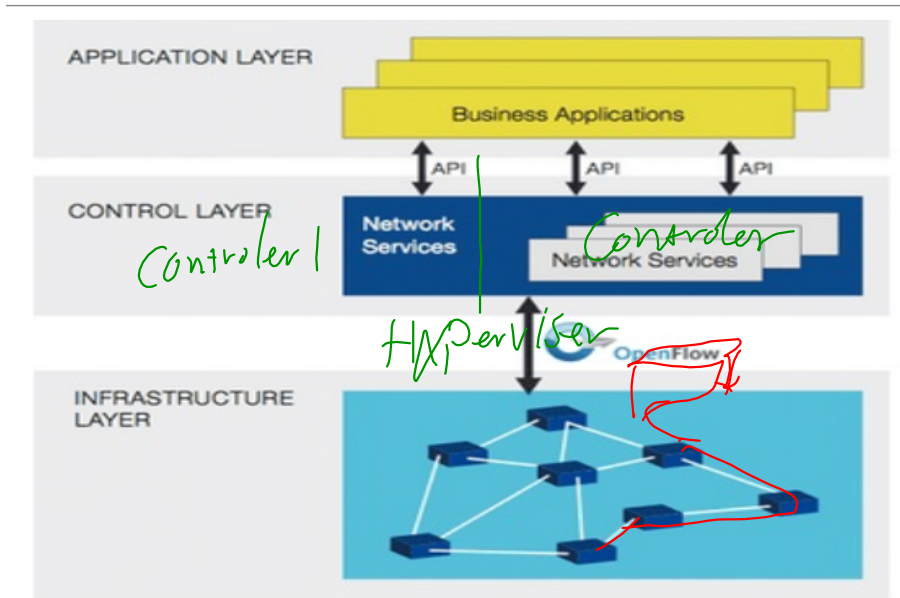


- ①
- Ray tracing
 - ideal reflection
-
- ~ 10-10000 rays



- a) theory ; meas
- b) Sensitivity analysis
for variables

- Today: radar cross section
- ② identify dominant
 - ③ power budget



IOT

low rate

high rate

ultra-reliable

5G

broadband

