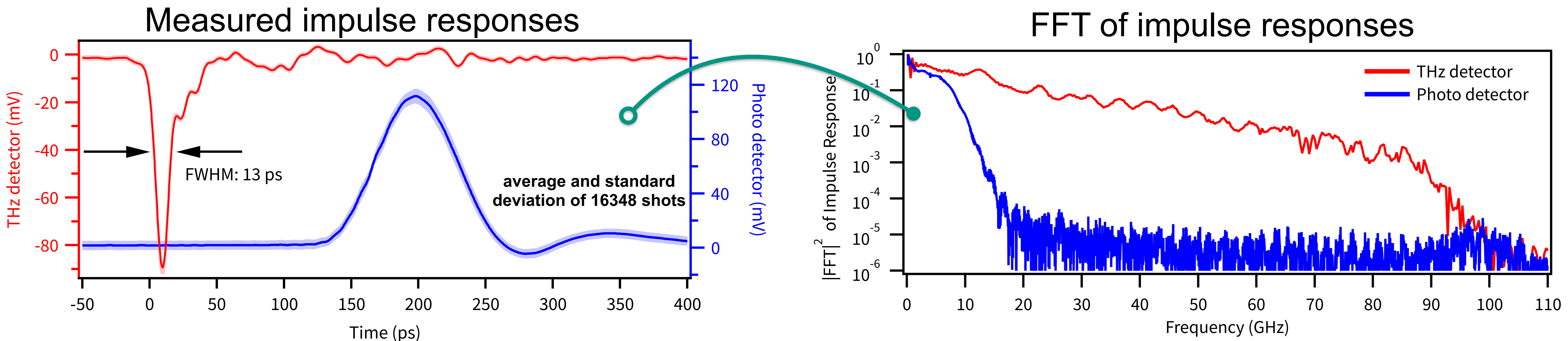


Towards direct detection of the shape of CSR pulses with fast THz detectors

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Simple direct THz Measurements

- Custom Off The Shelf (COTS) equipment keeps getting better
- Bandwidths of ~100 GHz become commercially available
- 100 GHz real time 4 channel 12 bit oscilloscope
- 12 GHz VIS photodiode (ISR) and a THz Schottky diode (CSR)



Measurements

- Short bunch mode (~ 7 ps zcbl)
- Microbunching instability
- Expected to see impulse response
- ISR stable as expected
- CSR shows structure
- Microbunching visible!
- Discuss with me at the poster!

