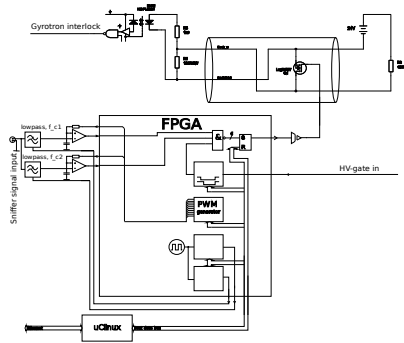
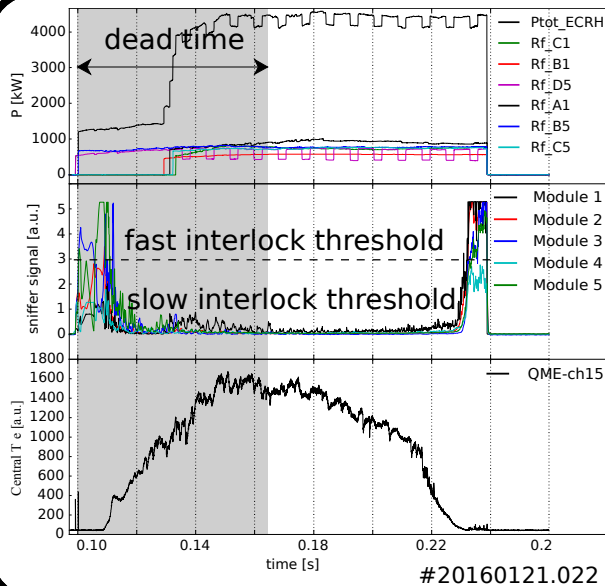
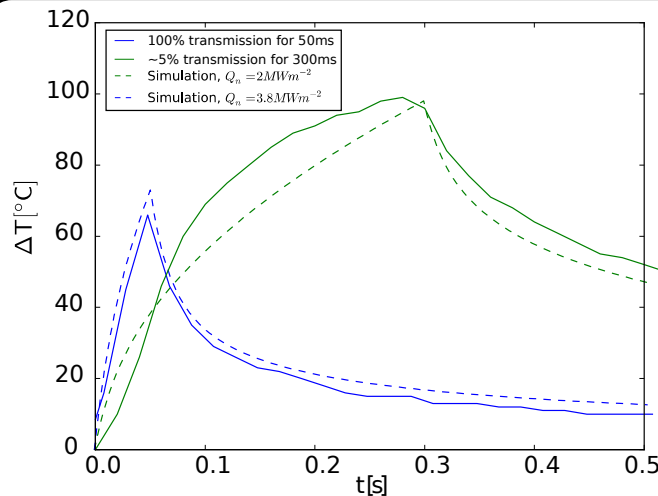


First Results from Protective ECRH Diagnostics for Wendelstein 7-X



- Stray radiation monitors (sniffer probes) used as plasma interlock.
- Only available plasma interlock during OP 1.1
- Integration in fast interlock system for ECRH
- Reliable termination of pulse when absorption was lost
- Strong contribution to success of OP1.1 → pulse length of 6s only possible with reliable interlock



- IR observation of ECRH shine through area
- Protection from overheating by non absorbed μ -waves
- Comparison with thermal calculations
- Contradictory results for different levels of transmission
- 5% transmission → simulated heat load comparable to experimentally expected
- 100% transmission → factor 10 discrepancy between simulated and expected heat load