

Meet Report 10/11/2019

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2019/10/11

Protocoll

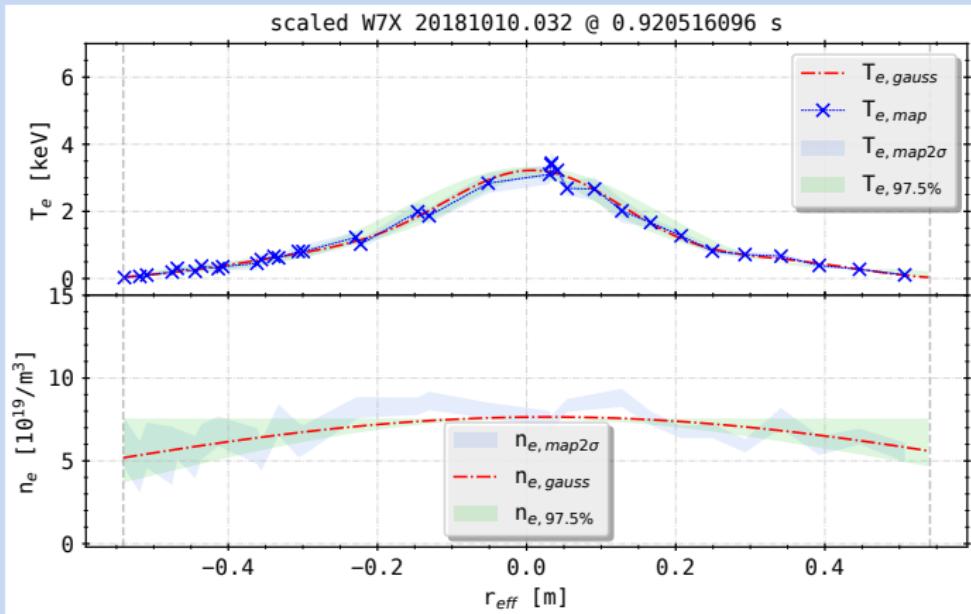
Last protocoll, 2019/07/11:

- 1 calculate sensitivity for channels – localistaion
- 2 rudimentally same channel selection (with regards to the number) seem to be more potent of information about plasma radiation
- 3 why is that the case? differences in radiation locals
- 4 applicable conclusions for feedback system

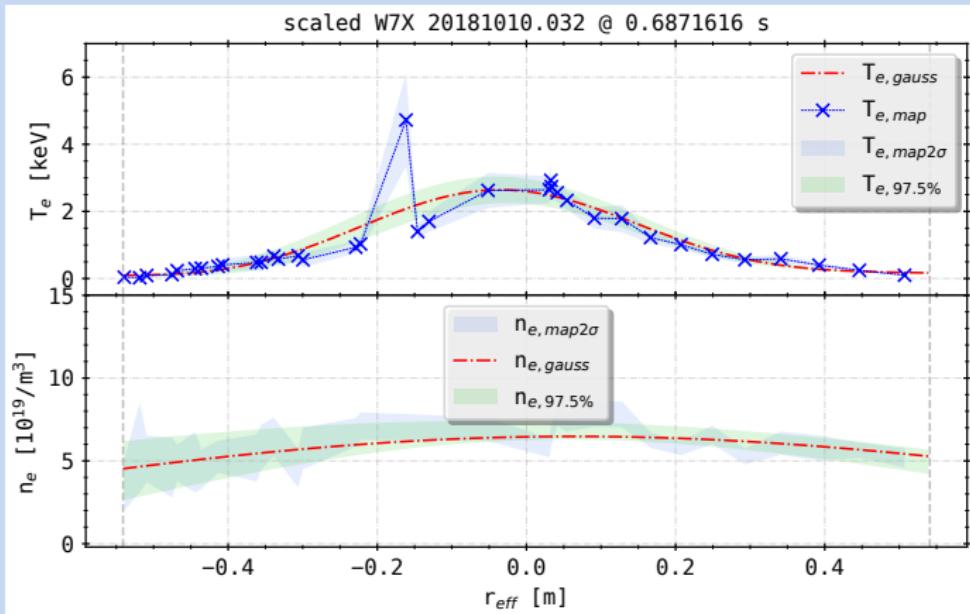
Protocoll

- + get n_e and T_e profiles regarding the analised XP IDs accordingly from QTB or divertor spectroscopy/MPM
- + just look at O2/O in HEXOS lines to figure stuff out, also C maybe
- + P_{rad} not always maximised at LCFS or island necessarily, rather $f(n_e, T_e)$ (moving in/out)

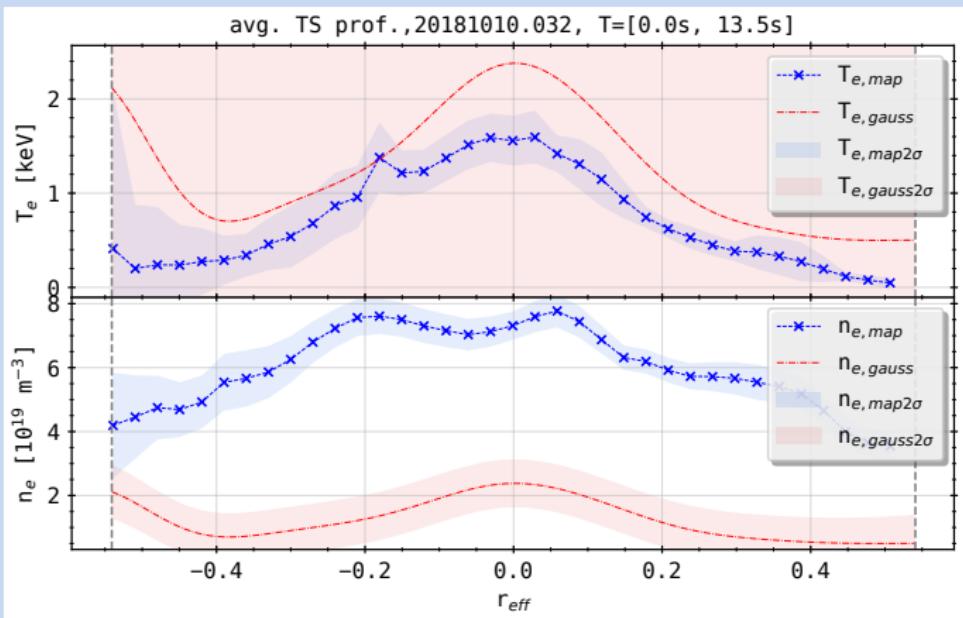
TS/QTB Profiles



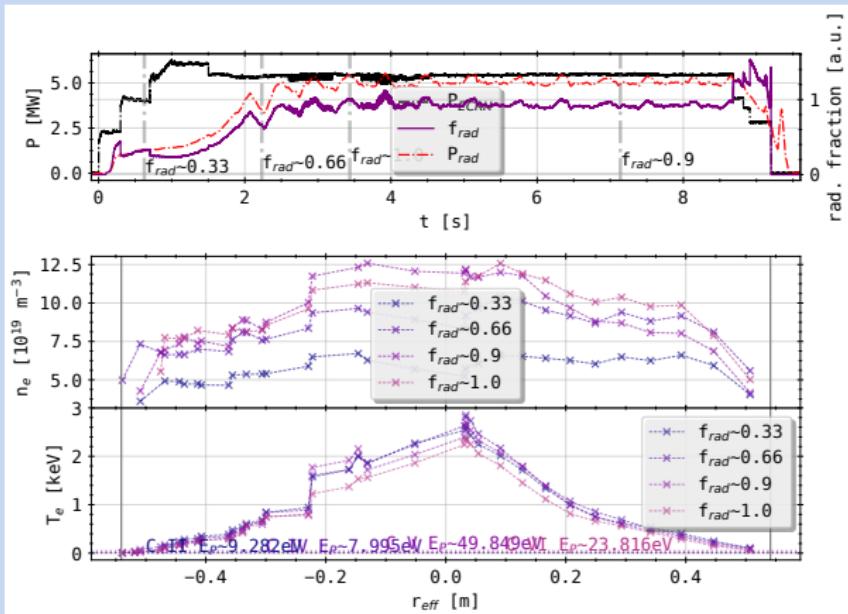
TS/QTB Profiles



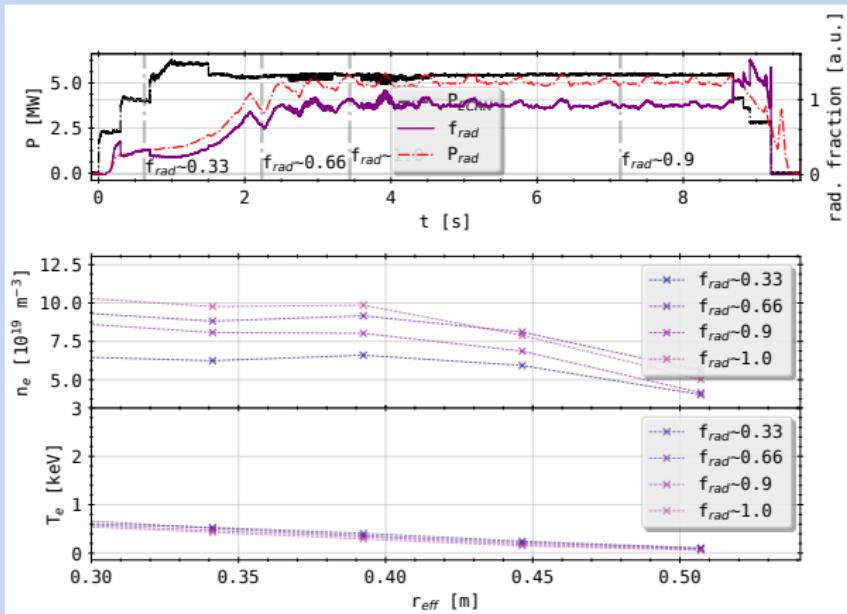
TS/QTB Profiles



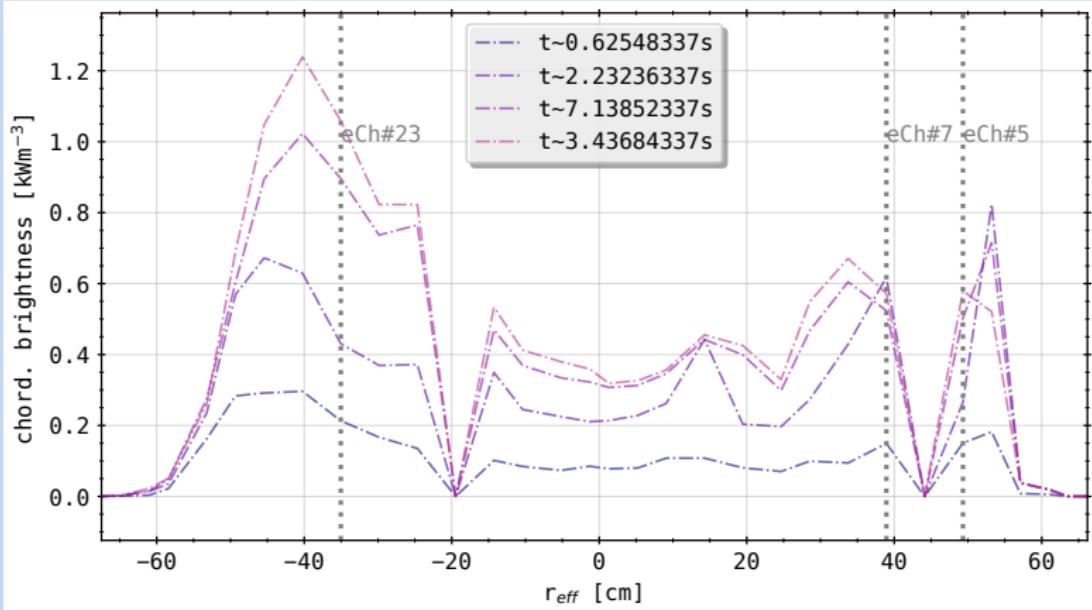
Radiational Fraction



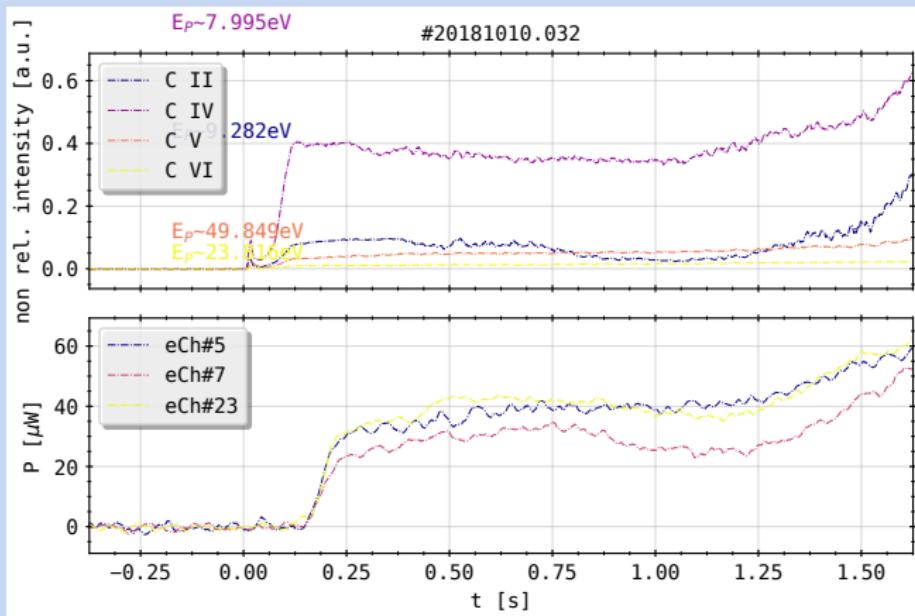
Radiational Fraction



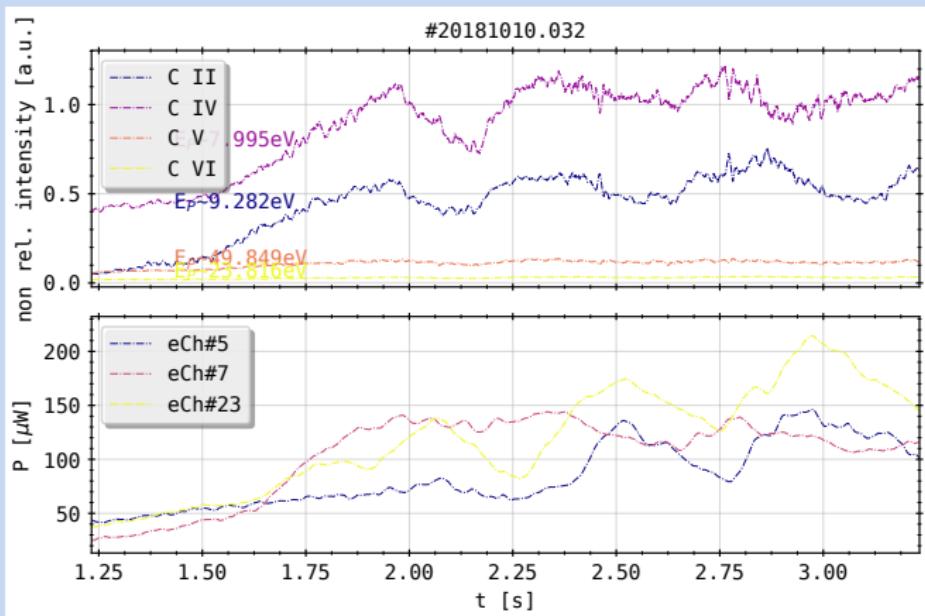
Chordal Profile and HEXOS Lines



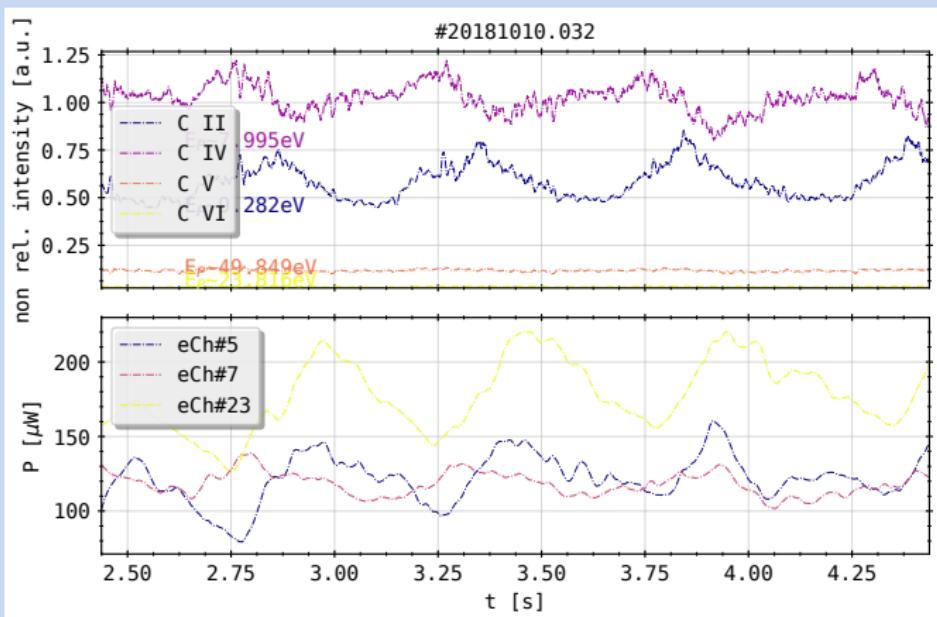
Chordal Profile and HEXOS Lines



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Chordal Profile and HEXOS Lines



Protocoll

- + QTB profiles most likely of insufficient accuracy and range for match with r_{eff} and ionisation energies or photon levels
- + L_Z needed and transport to link spacial position of radiation sensitivity (see channel number and analysis) to a possible ion/impurity species
- + using STRAHL code with already in the past set up geometric factors to predict radiation per channel and hence local emissivity of ion species
- + already have profiles to feed into STRAHL, else see MPM or maybe (more work) He-beam

