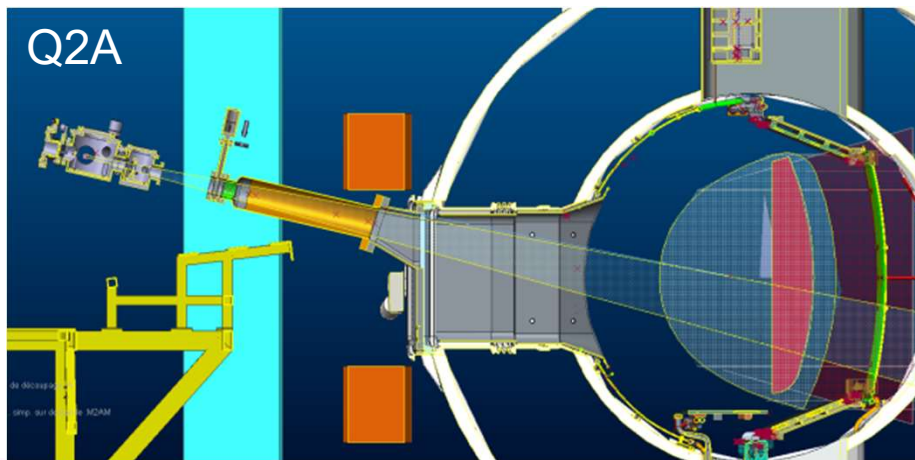


Status of KAIST-CEA Collaboration

WONHO CHOE, KAIST, Korea

Remy Guirlet, CEA-IRFM

- High-Z impurity (inc. W) impurity study
 - Compact Advanced Imaging EUV Spectrometer (**CAES**) and Bi-CCD detector are located in WEST (1-7 nm, imaging).
 - Fabrication of support and interface for WEST installation: done
-
- Collaboration with KAIST (Korea) since 2016
 - KAIST provided the spectrometer & detector
 - IRFM provided
 - interface, table, pumping, installation
 - instrumentation and control



IRFM Lab (April, 2019)



On-going or Under plan

- **The first measurement of VUV spectra was successfully done !**

Operation of the VUV diagnostics on WEST

- **Repair of CCD detector damage** (probably due to water condensation or pressure rise): **hopefully during C6**
- **DAQ:** Manual measurement → acquisition program **due for next campaign**
- **Hardware improvement:** Design and installation of a more suitable mask (or conductance limiter) to suppress stray light and to protect CCD detector from contamination

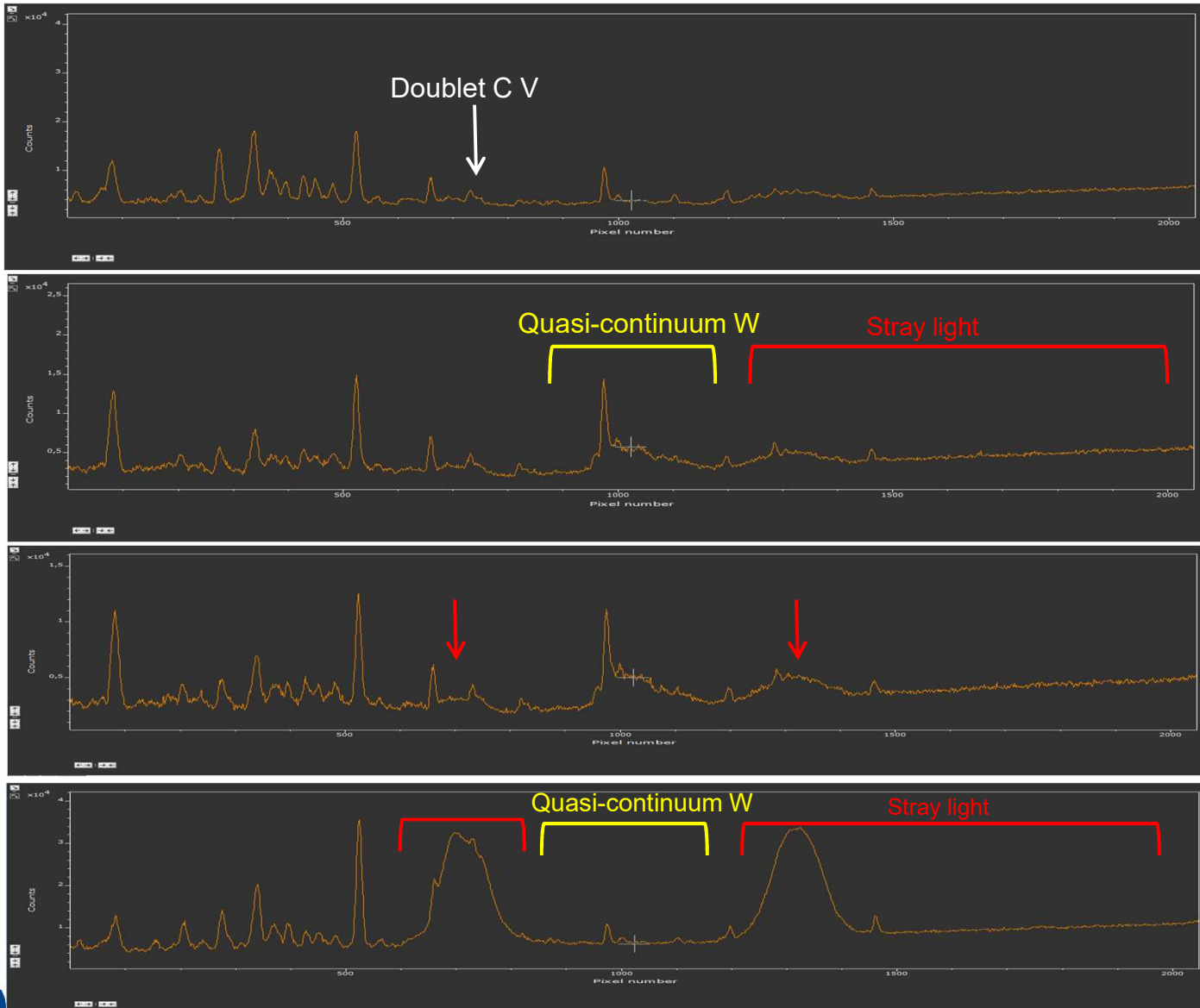
Analysis of the impurity spectra on WEST

- Analysis of acquired spectrum, comparison with the SIR system (grazing incidence spectrometer)
- Impurity transport modeling (KIM code, Local ionisation equilibrium)

Back up slides

The first measurement on WEST

Shot 54490
(19 July 2019)



Analysis On-going

- Analysis of acquired spectrum, comparison with the SIR system (grazing incidence spectrometer)
- Impurity transport modeling (KIM code, Local ionisation equilibrium)

SIR system

