

# Analysis Meeting 2018-05-17

## Connection details:

SUMMARY for Channel 16 / 17May2018: Topic 21 Analysis meeting:

Presentation: <<https://tv.euro-fusion.org/channel16/home>>

Presentation Password: topic21

Video-conference nr. (H.323): 004910097935079

ISDN: +49-30-20097935079 (ConferenceID = 97935079)

## Agenda

1. Welcome and introduction (5 min) - **N.Vianello and V.Naulin**
2. 2017 Experiment overview and status of analysis (20 min) - **N.Vianello**
3. Neutral density evolution in AUG L-Mode discharges (15 min) - **M.Agostini**
4. Shoulder formation from Reflectometer diagnostic (15 min) - **E.Sieglun**
5. Heat transport and power balance analysis (15 min) - **D.Carralero**
6. Filamentary transport and SOL broadening on MAST (15 min) - **F. Militello**
7. Update on H-Mode detachment on TCV (10 min) - **C.Theiler**
8. Discussion and open issues (30 min) - **All**

## Minutes

### Participants

N. Vianello, V. Naulin, J. Rasmussen, A. Nielsen,  
M. Agostini, M.Spolaore, C. Theiler,  
F. Militello, D. Carralero, K. McClements, E. Seliunin, W. Wolfrum,  
D. Briga, M. Komm, J. Adamek, A. Hakkola, J. Kovacic

### Presentation and questions

1. N.Vianello
  - W. Wolfrum point towards a better reference for 0.6 MA
  - A. Nielsen suggests HESEL code for current scan
2. M. Agostini:
  - W. Wolfrum : not a line integrated measurement of the Stark Broadening
  - F. Militello and D. Carralero: issues on temperature estimate with very unlikely estimate of temperature at the target
  - D. Carralero: Molecular D2 from Eirene simulation which can't be seen from this type of analysis
3. E. Seliunin
  - F. Militello: poloidal location of the measurements and location of the fueling
  - D. Carralero: Individual profiles and relation with the filaments. Are the single filaments affecting the profile reconstruction
4. F. Militello

- D. Carralero: Charge Exchange to take into account the cooling of ion temperature but this can be also the method to cause clogging of filaments

5. D. Carralero

- V. Naulin: question on the fact that power are going almost at 80 % in the ion channel. Need to check for LCFS location and inconsistency with simulation

**Action to be taken**

- [ ] Better evaluation of reference LiB profiles for 0.6 MA in AUG
- [ ] Recomputation of density inversion from Stark-Broadening taking into account this is not a Line Integrated measurement
- [ ] Evaluation of Amplitude vs  $\Delta\alpha$  for AUG to compare with similar JET results
- [ ] Statistical evaluation of Amplitude on TCV using homogeneous database
- [ ] Combination of present Topic-21 experiment with past experiment on AUG in H-Mode
- [ ] Evaluation of front-movement from Multispectral Imaging (MSI). Check which filter exists and if inversion is feasible
- [ ] HESEL simulation during Ip scan for TCV and AUG
- [ ] From HESEL can we get information on blob evolution with decreasing Ti due to higher CX losses from neutrals?