**Minutes of TSVV-7 Team Meeting 11.02.2022**

1. Personnel:
   1. FZJ: new post-doc position for ERO2.0: Christoph Baumann
   2. VTT: new PhD position for MD: name?
   3. KTH: new PhD 100% for MEMOS-U: name?
2. Most of sub-projects progress according to plan / task specification:
   1. BIT1: code refactoring, stepwise update of old MC part; approach to ne ~1e22
   2. BIT1: alternative approach to time dependent SOL transport (blobs); ne ~1e21
   3. SPICE2: interplay of TE, SEE, EBS, surf T dependence, esc. current vs Te and Ti
   4. SPICE2: implementation of non-uniform particle injection
   5. MD: testing generation of supersaturated surfaces, 2022 targets to be met
   6. ERO2.0: implementation of DEMO geometry and plasma (see point 5 below)
   7. MIGRAINe: parallelization; 2022 will do some scoping studies with DEMO plasma
   8. MEMOS-U: rewriting from scratch using AMRex (adaptive meshing with built-in parallelization) -> ACH support to be envisaged in 2023
3. Marconi Fusion HPC:
   1. Cycle 5: ~80% of budget used, ~90% probably consumed by the end of the period
   2. Cycle 6: full request allocated incl. 1000h GPU for ERO2.0
4. ACH support:
   1. ERO2.0: progress meeting on will be held on 17.02.2022
   2. SPICE2: more exchange with ACH desired -> progress meeting to be organized
   3. MIGRAINe: initial OpenMP parallelization very satisfactory, load balancing especially for long trajectories tbd -> Ladislas and Jan to discuss internally
5. DEMO geometry, equilibrium and plasma solution:
   1. Baseline equilibrium 2017, respective geometry and SOLPS-ITER plasma solution (F. Subba 2021) available from DCT, data files at FZJ to be shared with KTH
      1. Still not fully DEMO relevant, upgrade to be expected by the end 2022
   2. DEMO start-up profiles (dust mobilization?) and DEMO VDE heat fluxes and halo currents to be clarified with DCT/WPDES -> Svetlana will contact Francesco & Co
6. IMASization
   1. What do we want to exchange between the codes within TSVV, e.g. PIC to ERO?  
      -> discussions to be organized between code users
   2. Which output is generally to be considered useful for external parties?  
      -> list of input/output data by the codes (incl. data type, dimensionality, size, etc)
   3. Are there proper data fields for PWI within IMAS?  
      -> clarify who will implement new, currently missing data fields (ACH, E-TASC SB)
   4. 2022: IMAS compatibility requirements and implementation workplan  
      2023: practical work with ACH support
   5. IMAS training 2021:   
      <https://docs.psnc.pl/display/WFMS/Tutorial+-+adapting+codes+to+IMAS>