HCD session points

- **Towards long pulse operation of N-NBI ion sources – C Wimmer**
  - Cs stability in space & time / integration of developments on ELISE, SPIDER, MITICA and ITER / ITER target in H met ☺, D more difficult
- **Towards long-pulse and continuous positive-ion-based neutral beam injection – C Hopf**
  - Whole system analysis / transmission / neutralisation – gas & pumping / sputtering / fully actively cooled / conditioning of NBI on plasma / reliability & availability and extrapolation to long pulse
- **Non-inductive current drive efficiency in FNS Tokamak- E Dlougach**
  - Importance of whole system analysis for HCD optimisation / NBI losses in STs
- **NBI performance for long pulse operation in KSTAR – J Kwak**
  - Conditioning of NBI on plasma / successful long pulses but degradation of performance over pulse / relation to magnetic fields
- **Fast-ion confinement in NBI plasma for long-pulse operation of EAST – Jinfang Wang**
  - NBI in Super-conducting devices / NBI <-> ICRH <-> plasma optimisations / HV breakdowns in long pulses
- **High-power and long-pulse operation of ICRH system in EAST tokamak – Lunan Liu**
  - Whole system design for long pulse / ICRH optimisation for low W influx / active cooling design / load matching in long pulse operation / achievements in long pulses