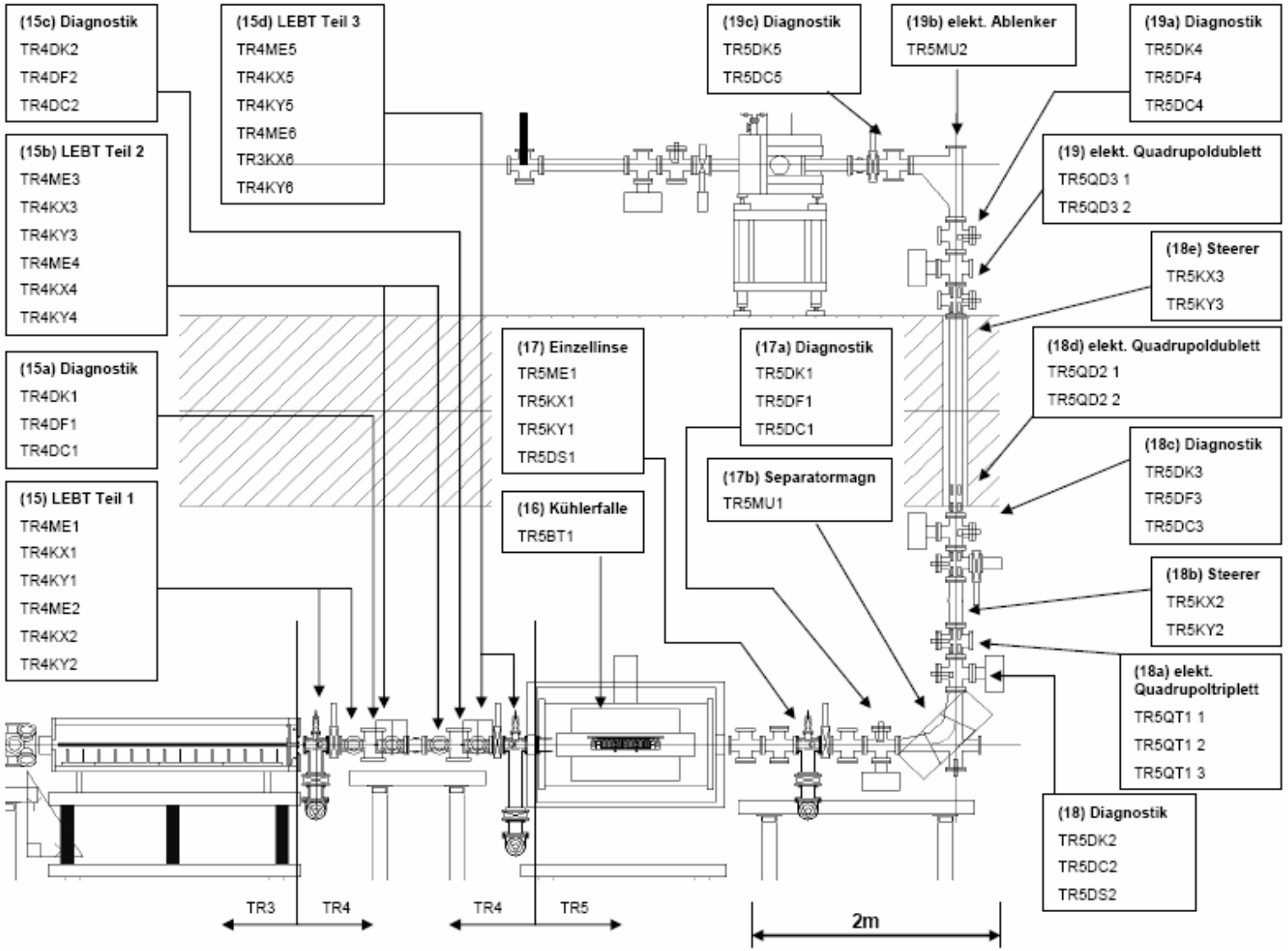
Definitions

- Static values
  - tune once – stay forever
- Dynamic values
  - might change from pulse to pulse (ESR macro pulse every 10 s) or even within a pulse (electron separation, ejection etc.)

Note: During tuning the static values are also dynamic.

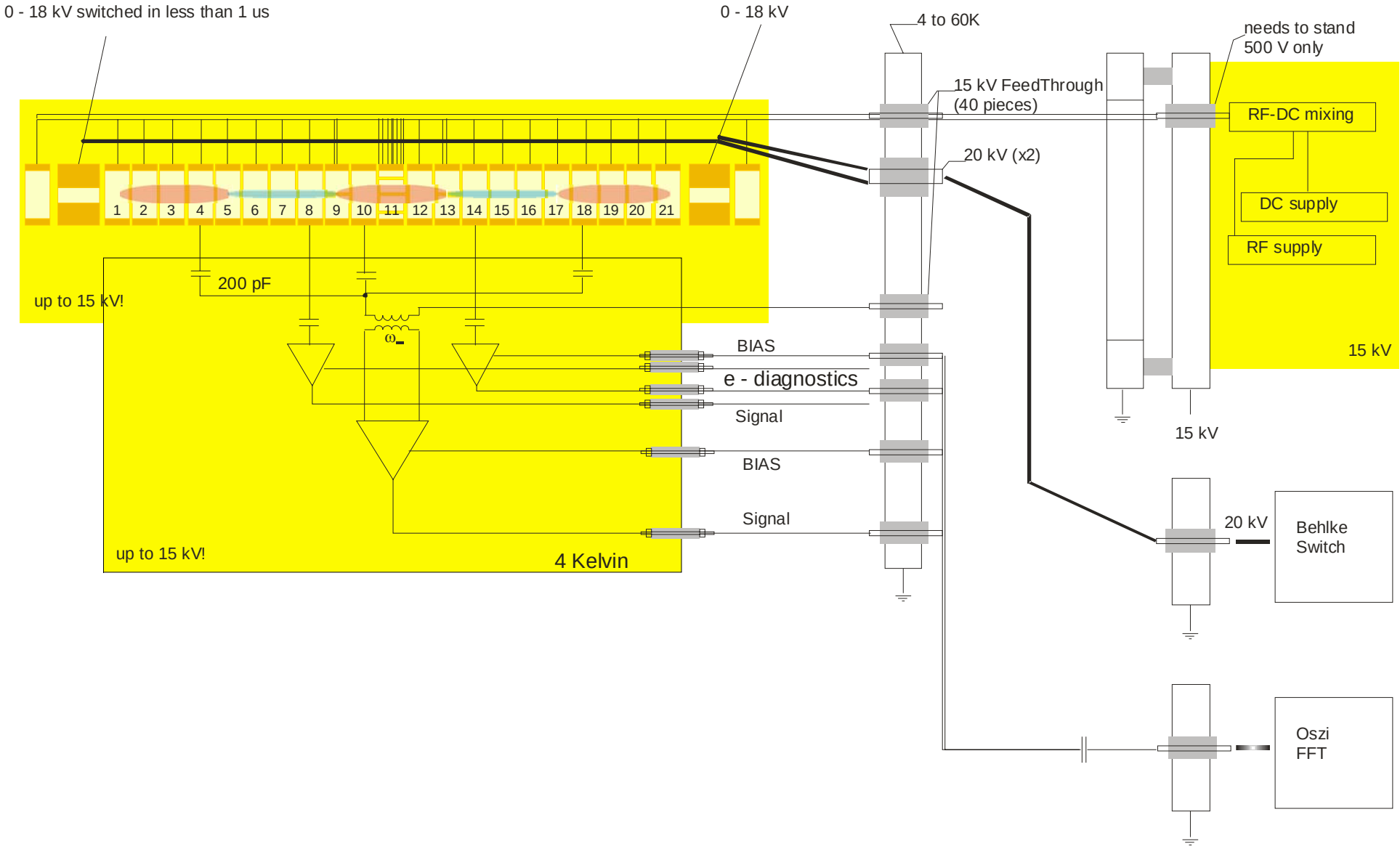
The Low Energy Beam Transfer



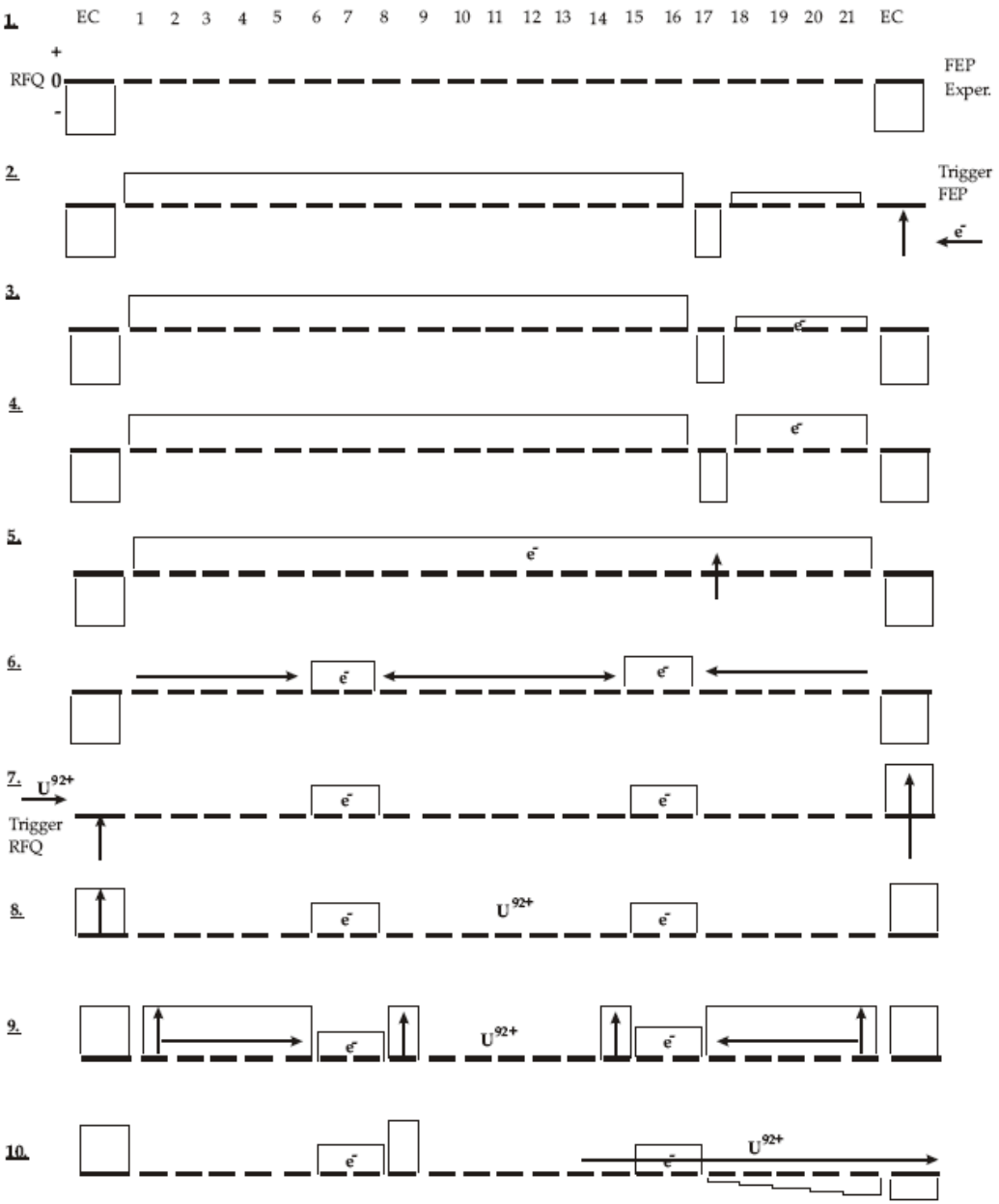
Tasks

- Set, read, reset, save, load of static values
  - in groups
  - one by one
- Tuning of static values
  - change value from pulse to pulse and relate it to a given signal programmatically
- Operation of the CoolerTrap
  - static and dynamic values (voltages, frequencies, times)

Operation of the Cooler Trap



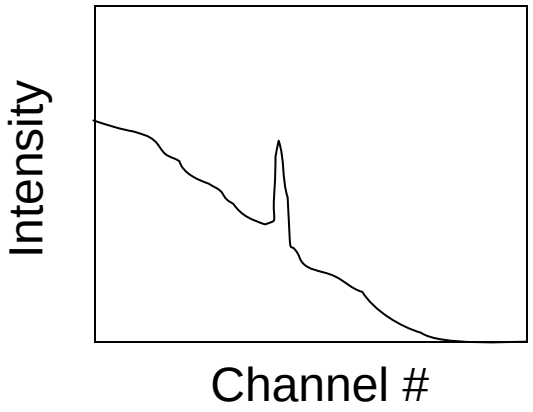
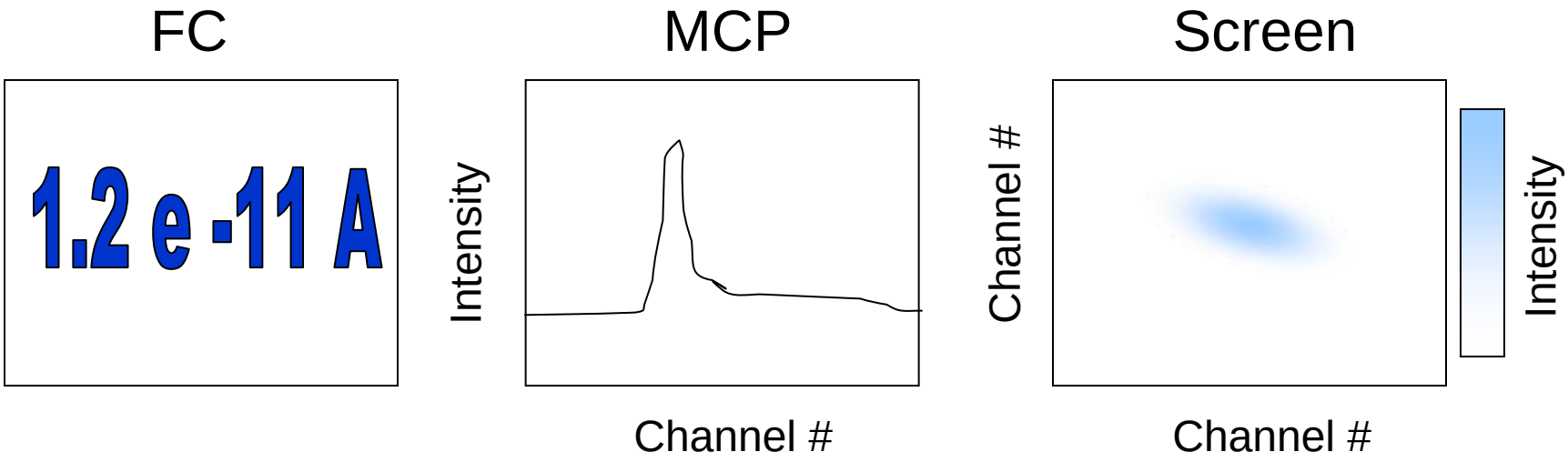
Sequencing



- Actual timing will be controlled by hardware (FPGA)
- Sequence and voltages might change from pulse to pulse (tuning)
- Fast voltage changes within one sequence are preprogrammed in the power supplies

Detection

- FTICR



- Intensity after ejection (FC, MCP, Screen)