

CASPER Workshop 2025

Monday 8 September 2025 - Friday 12 September 2025

ASTRON Netherlands Institute for Radio Astronomy

Scientific Programme

Radio telescope digital signal processing systems

Radio astronomy instruments, instruments that detect transients, use interferometry, use phased array antennas, large sensor arrays etc.

Platforms

FPGA, ACAP, RFSoc, DirectRF, GPU and other platforms of interest.

Algorithms & processing concepts

Novel data processing concepts, algorithms and implementation e.g. high speed data capture (FPGA->GPU), radio astronomy DSP, filter banks/FFT, RFI mitigation, precision timing, beam forming, correlation.

Development Tools

Development tools to speed up application design. Graphical front ends, design entry, code building back ends, scripting tools etc.

Discussion panels / breakout sessions

TBD during the workshop