MAX IV RF

Fundamentals of Radio Frequency Control for Particle Accelerators

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Objectives

- Course is aimed at non-electrical engineers with little experience in RF
- Course is designed to illustrate frequency domain system design concepts necessary for the understanding of RF control systems for particle accelerators

References

- Design of a ring RF system D. Boussard(CERN) Jan, 1991
- https://www.scandidavia.com/rfcourses/
- https://github.com/dspsandbox/FPGA-Notes-for-Scientists

Experience

- Ph.D. from University of Wisconsin- Madison
  - superconducting thin film millimeter amplifiers
- Worked at Fermilab for 23 years
  - Stochastic cooling arrays and systems
  - Beam Stabilization systems
  - 21 cm dark energy FFT Radio telescope
- ESS in Sweden for 7 years
  - RF Group leader
  - Chief engineer responsible for the redesign of the Linac
- MaxIV for 5 years
  - RF Group leader
  - RF Engineer concieved and built Mode 0 system
- BL Monitor and Control AB for 2 years
  - Designed Blinky-Lite control platform