

# System Integration

MWA/LFD Kickoff Meeting

Roger Cappallo

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# Challenges

- Due to distributed nature of design effort it will be imperative that we establish clear, clean, and well-documented interfaces between all of the sub-systems

# Prototyping

- An advantageous prototyping path would be provided by the planned solar array of  $\sim 32$  tiles:
  - A correlator for up to 32 MHz BW *could* be fit into a single FPGA, perhaps on an evaluation board, using the same DSP cell approach as the full size correlator; OTOH may want to use multiple SKAMP boards
  - A direct-sampling digital receiver would then allow early experience with all projected elements of the full LFD

# Testing

- Extensive independent testing at the sub-system level
- Facilitated in digital systems (rcvr, dtl, corr., r.t. apps) by adherence to tcp/ip standard, which allows software on PC's to be sources and sinks of data streams