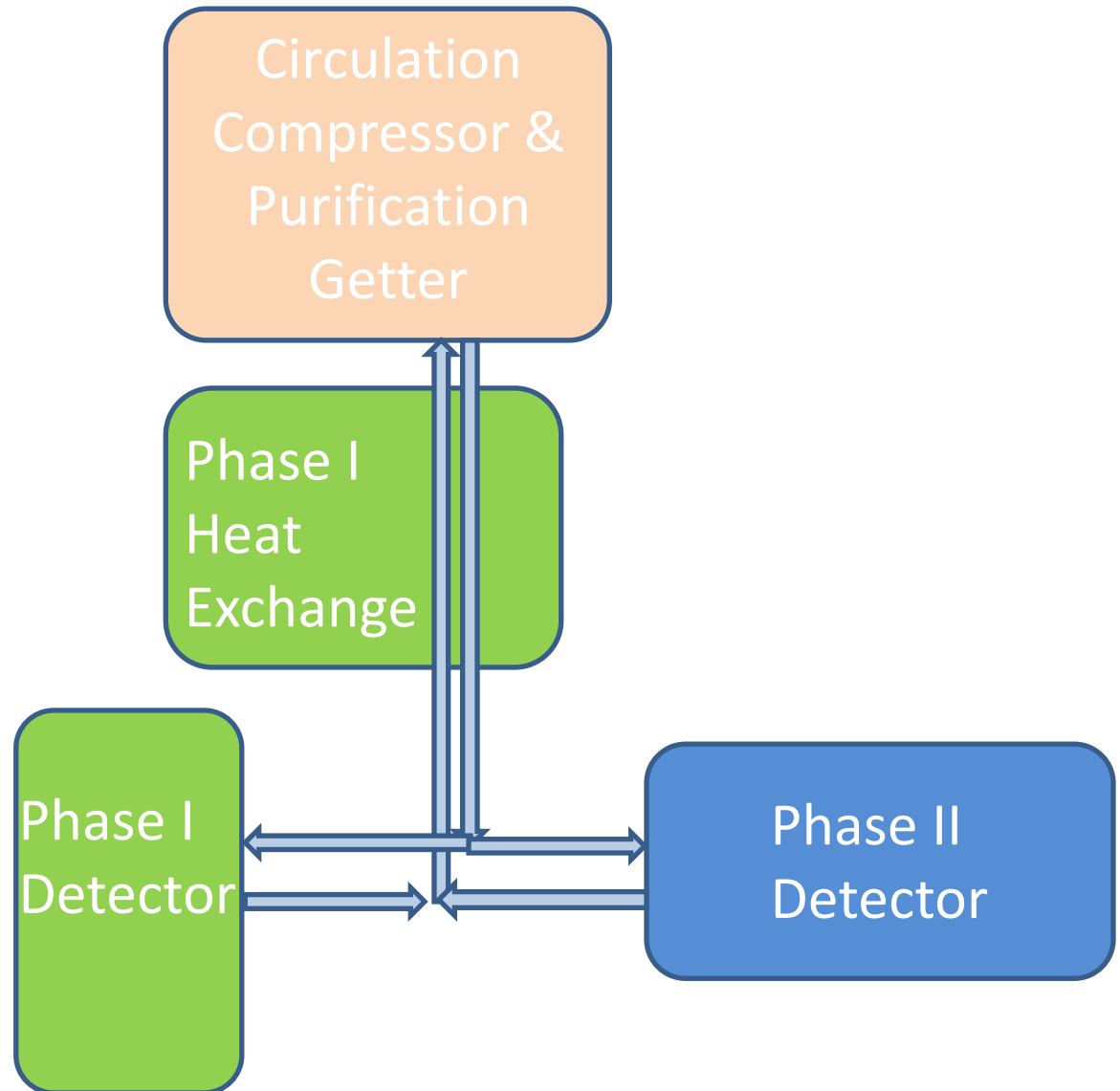


# Steps Towards a System Test Second Phase

Shaun Alsum

# Basic Layout



# Main areas of consideration

- Vessel
- Cooling
- Liquid lines to detector
- Recovery

# Vessel

- 4 holes, what goes in where? (HV, liquid in, liquid out, ??)
- What instrumentation is required?
  - Thermometers
  - Level sensor?
  - Pressure?
- Pressure equalization lines needed?
- Where, exactly, will it be positioned?

# Cooling

- How many thermosyphons needed?
  - Double headed? (3 TS?)
- Precooling needed?
  - How to precool
    - Some direct flow of LN?

# Liquid Lines

- Do we need to cool them? TS?
- What sizes do we want? (LZ looks like it has .75" outlet, two .625" inlets)
- Should we test out liquid control valves?
  - LZ ones are \$11k, 50cm standoffs
- Need to redesign U-tube accordingly, and perhaps have room for TS and rtds

# Recovery

- Too much for SRV, hopefully can borrow LUX compressor
  - Max in: 30 PSIG
  - Max out: 1200 PSIG
  - Max achieved flow: 18 SLPM
- Compressor and bottle farm located in compressor shack
- To Getter or not to getter?



# Possible Recovery Path

