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# MACS Instrument simulation

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# MACS at NIST in Washington, USA

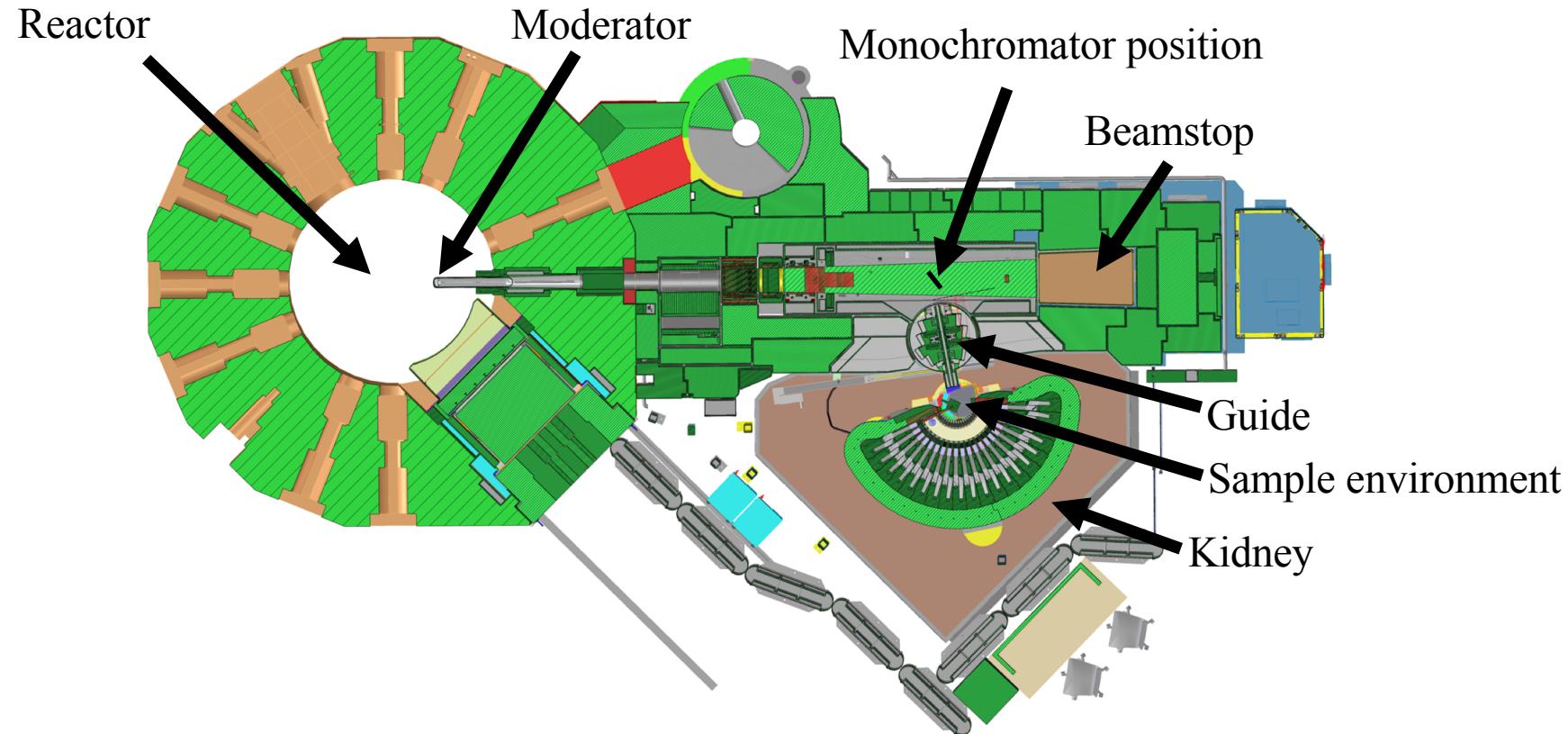


Image from NIST webpage

# MACS

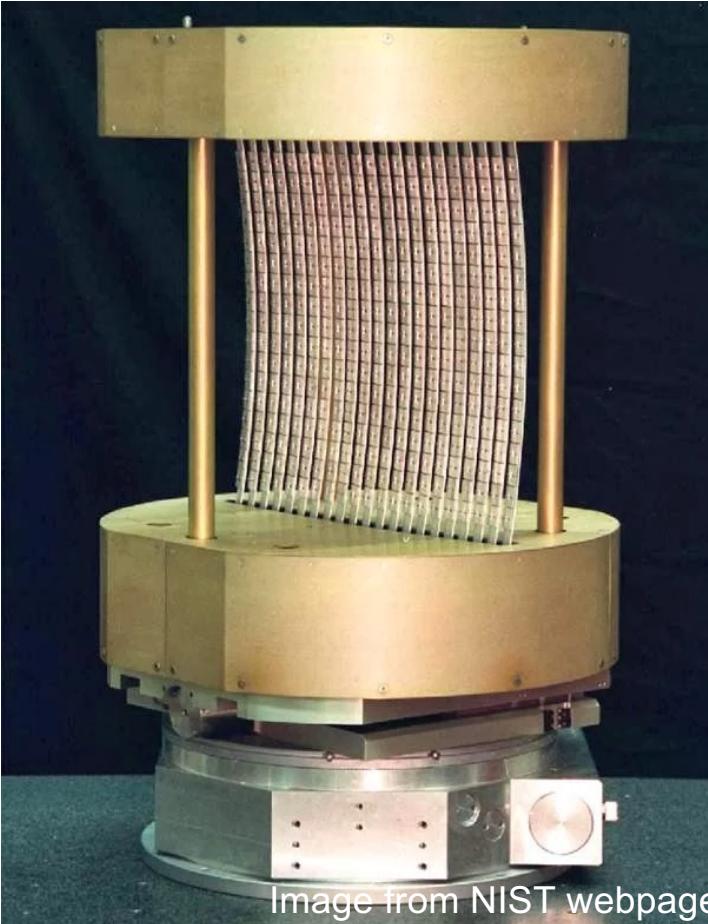
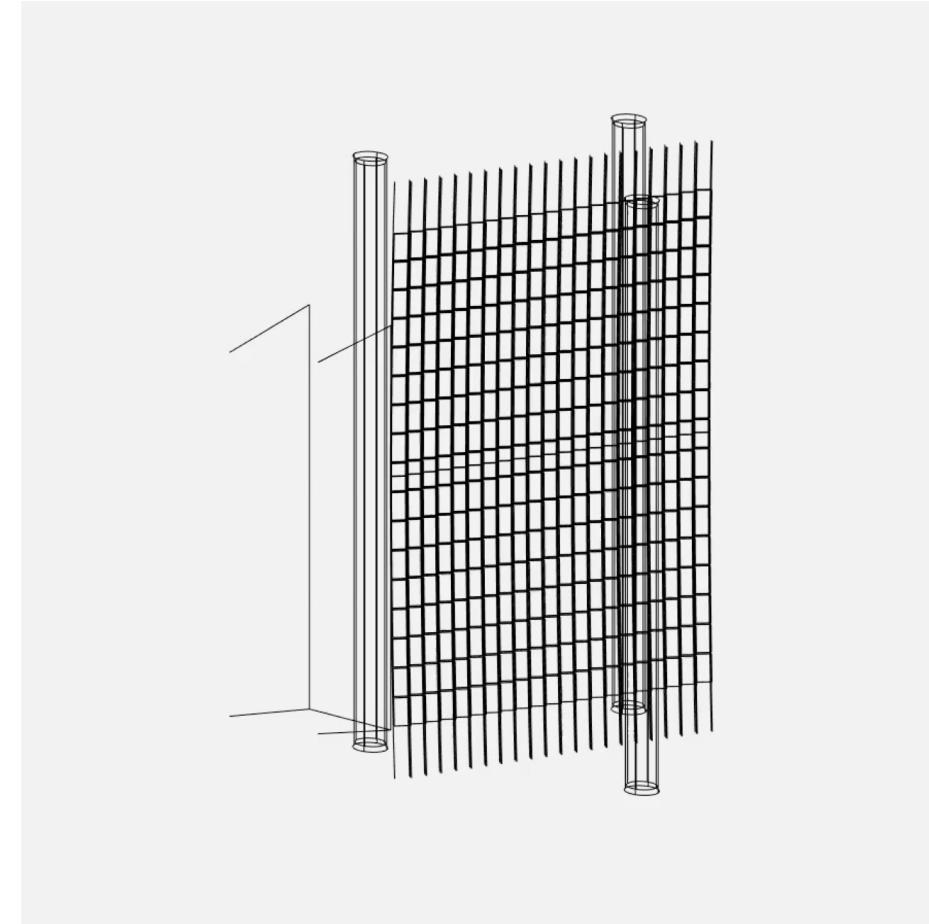
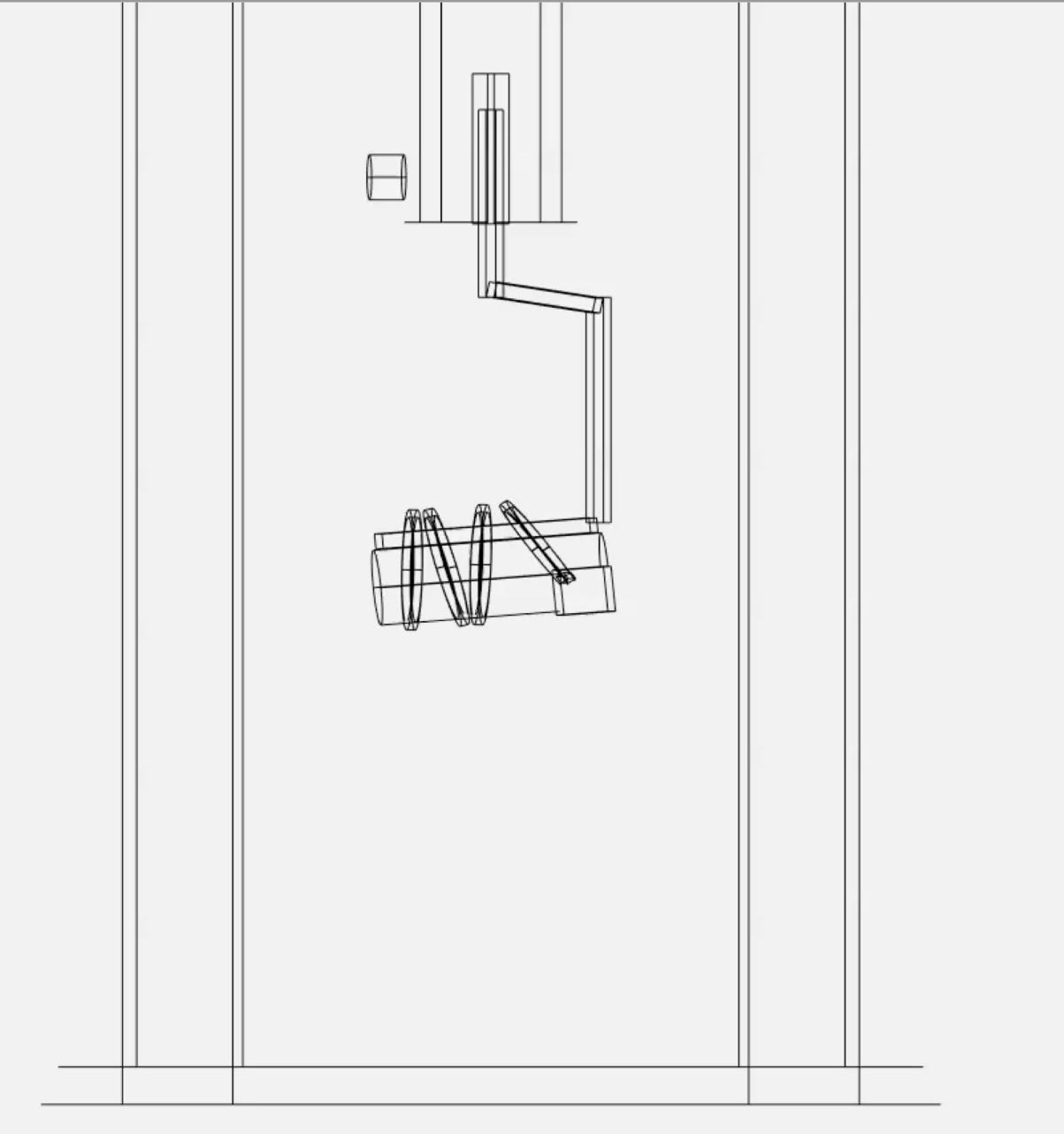


Image from NIST webpage



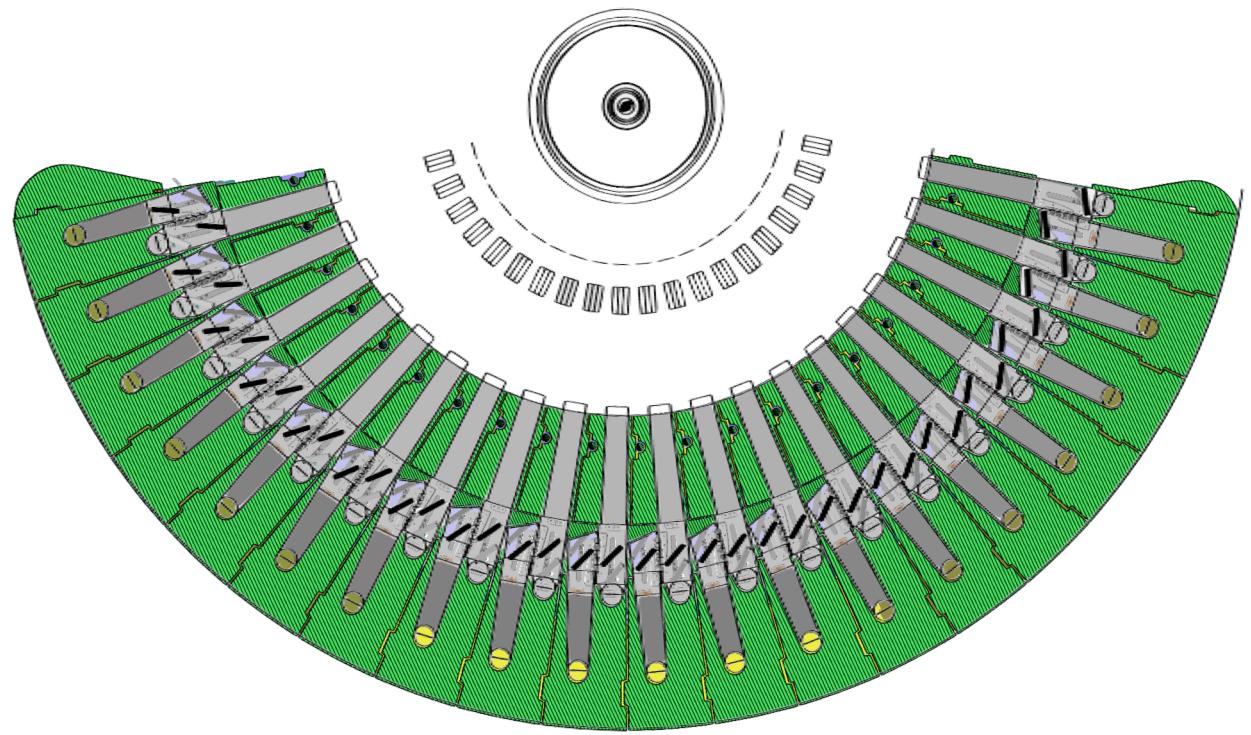
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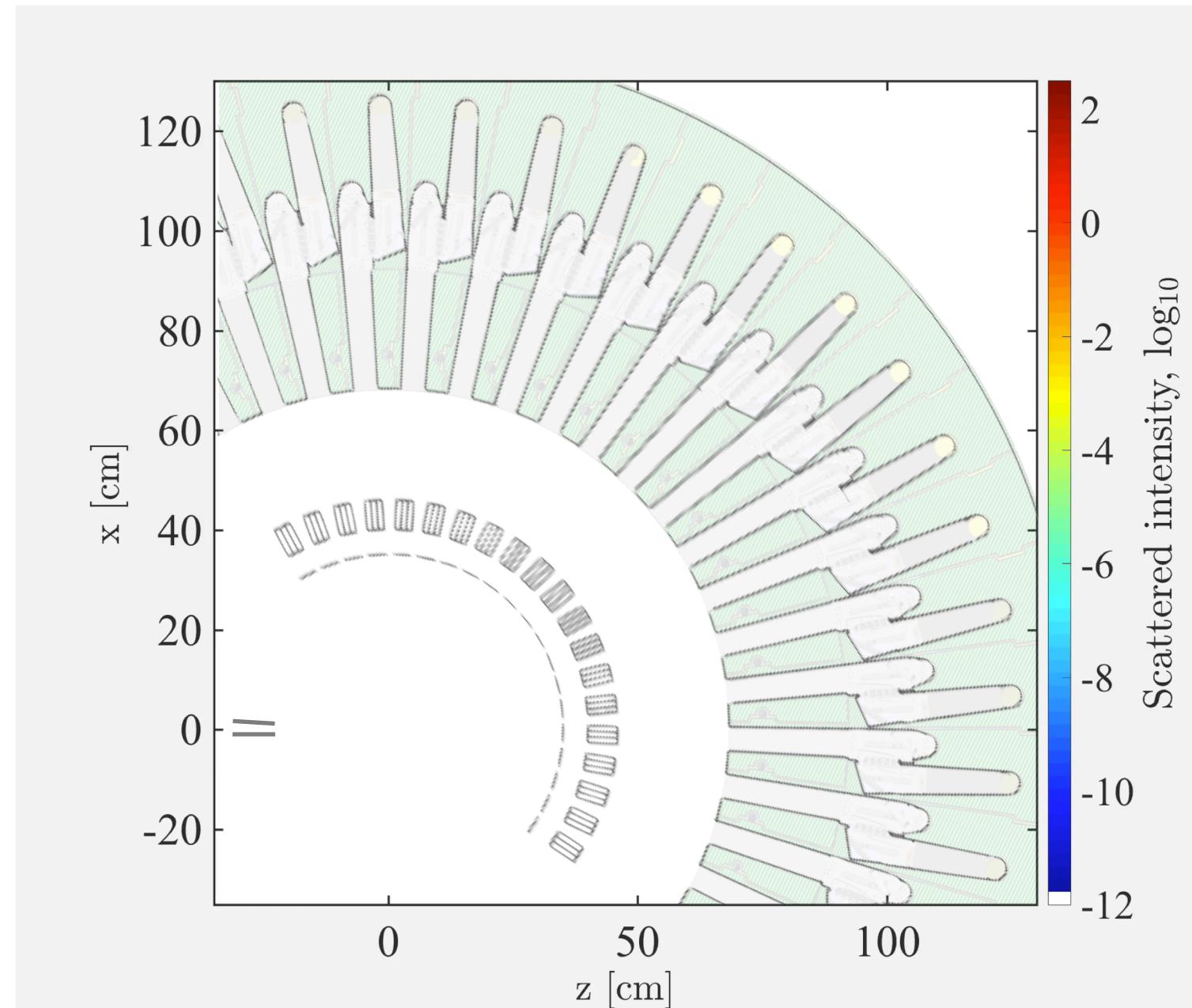
# MACS

- CAD model of instrument backend
- McStas model of instrument backend
- More than 600 geometries
- 2 Union master components



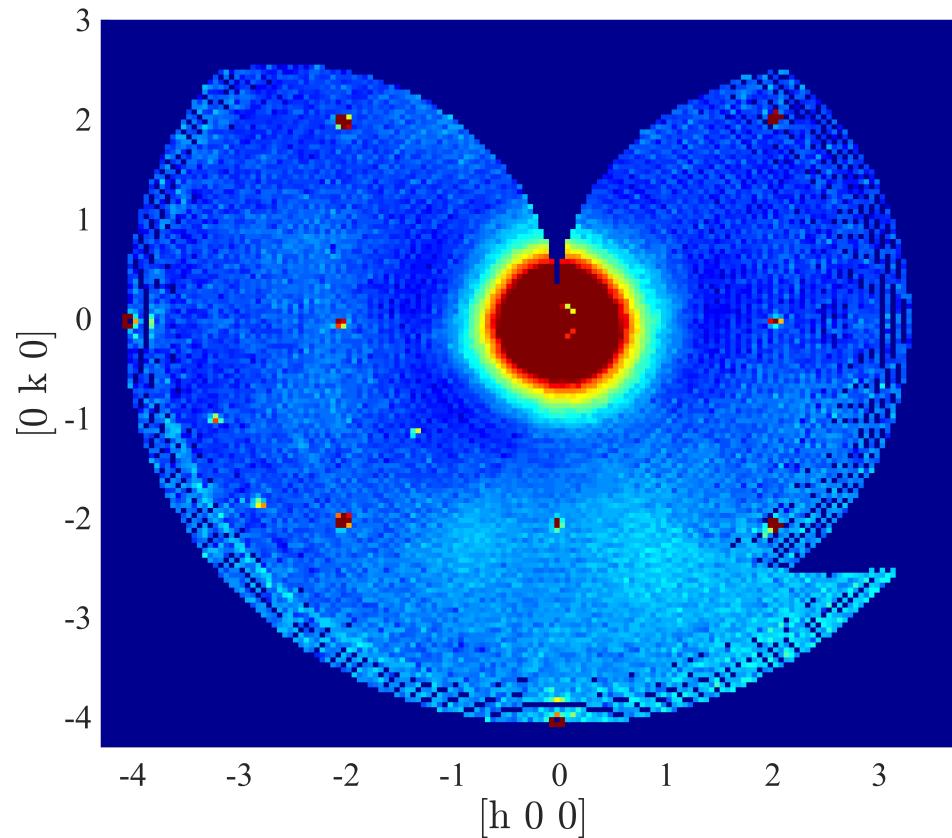
# MACS

- Elastic incoherent air scattering
- Monochromator 5 meV
- Analyzer 5 meV
- Instant pulse from source

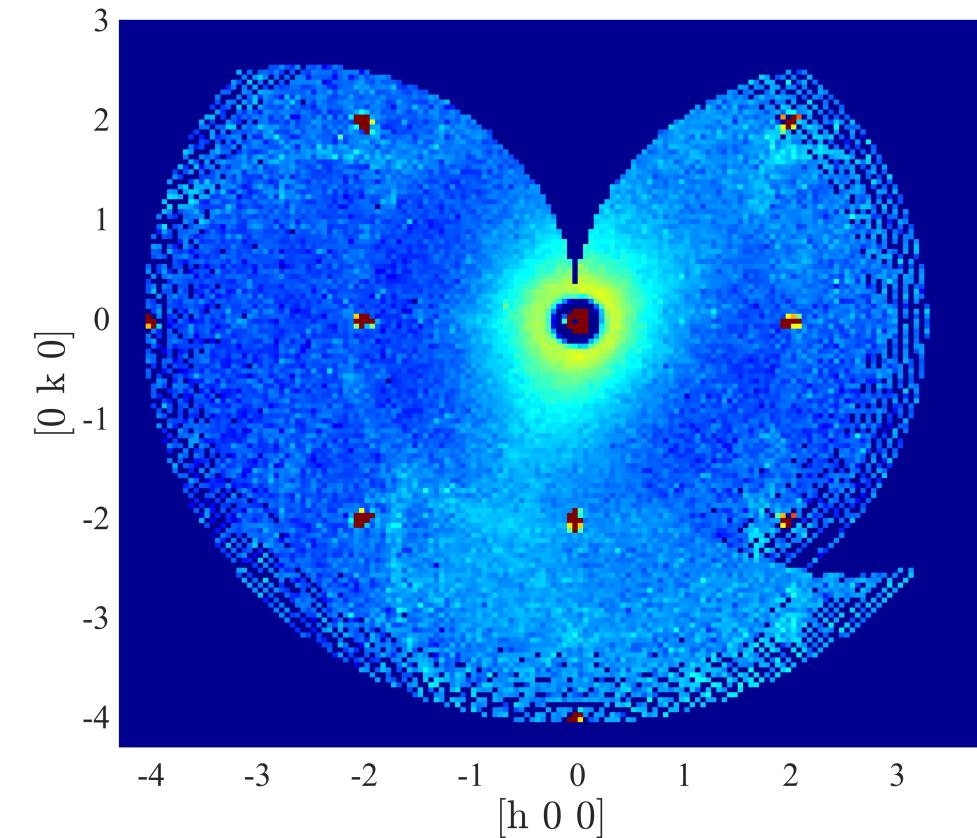


# MACS Results

Measurement



Simulation



# Conclusion

- Union components can be used in practice for complex instruments
- Still difficult to get all background simulated correctly
- Can learn a lot about the instrument from the simulation

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