HPA TECH RETREAT 2022

FINAL SAMPLE

Virtual Production Sound Challenges

Eric Rigney, Rigney Global Entertainment

Final Sample – Virtual Production Sound Challenges

3D Acoustical Camera

Adam O'Donovan, VisiSonics

- LIVE FEED, from HDMI output

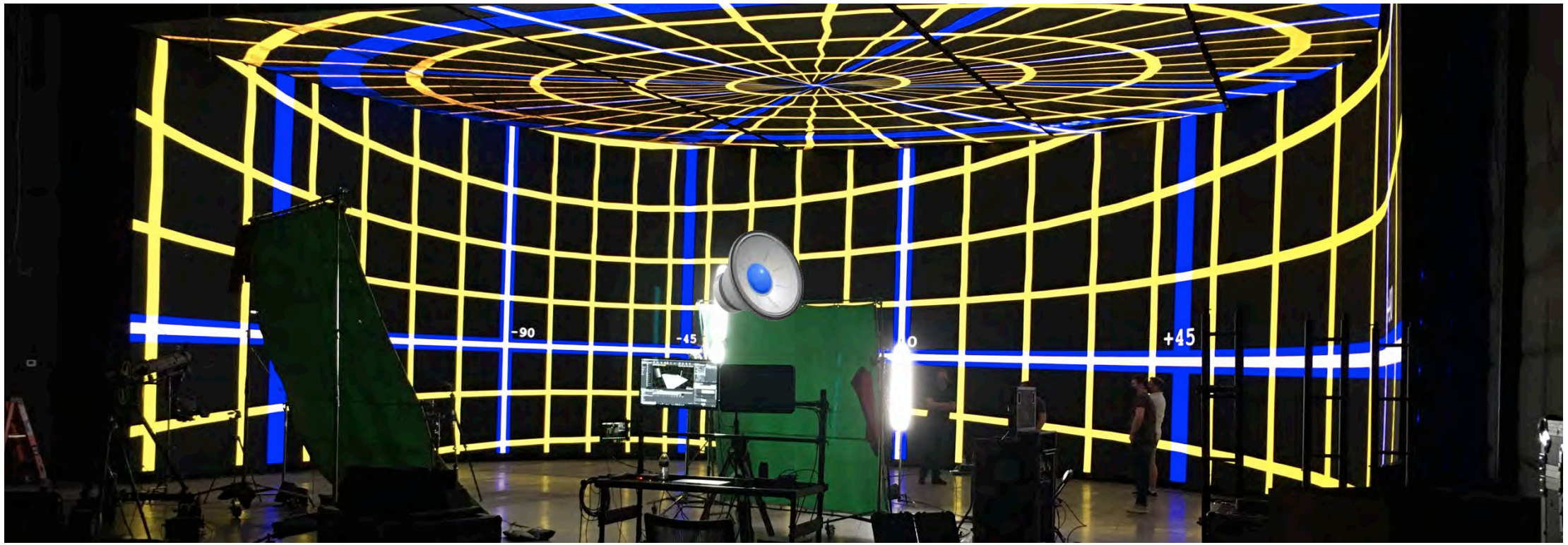
Final Sample – Virtual Production Sound Challenges

- Reflection & Noise Demonstration
- Final Sample & Final Pixel
- Mitigation
- Production Sound
- Post Sound
- Future Technologies

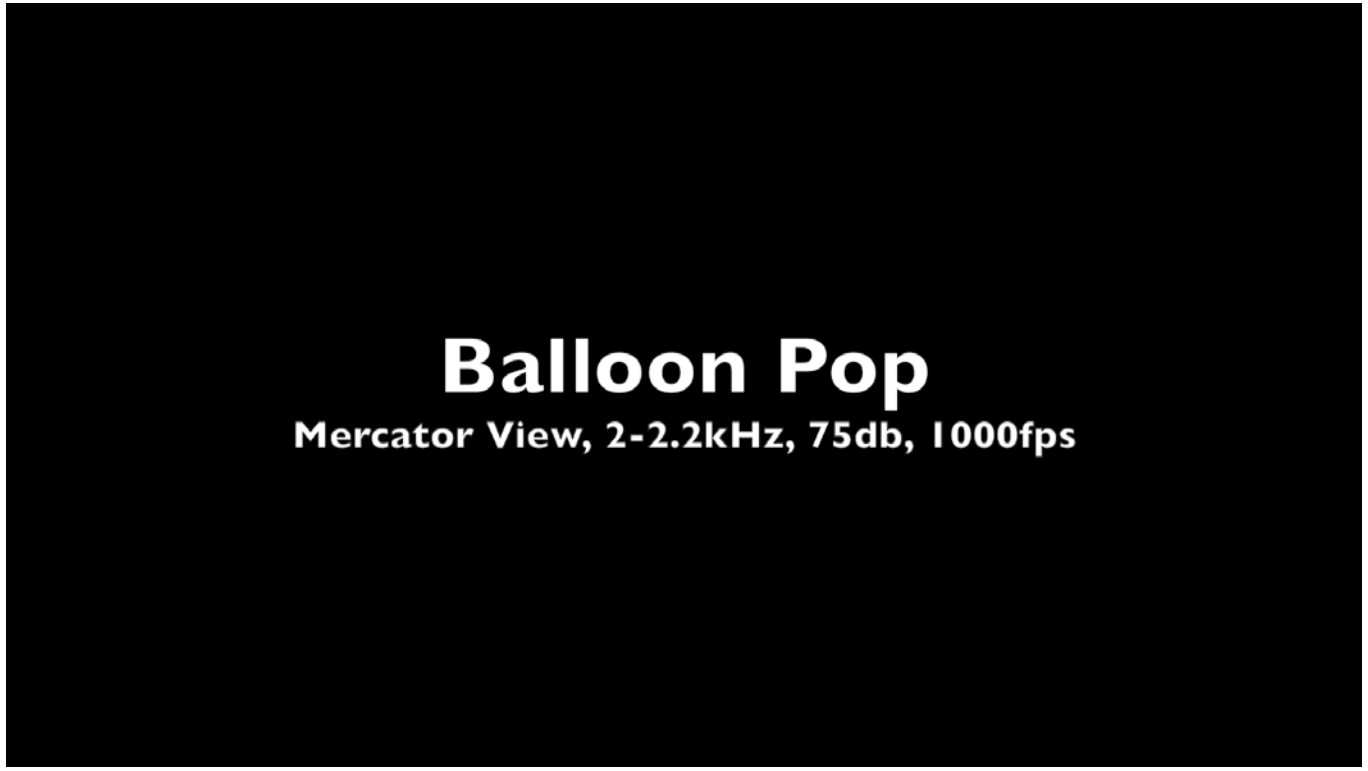
Final Sample & Final Pixel

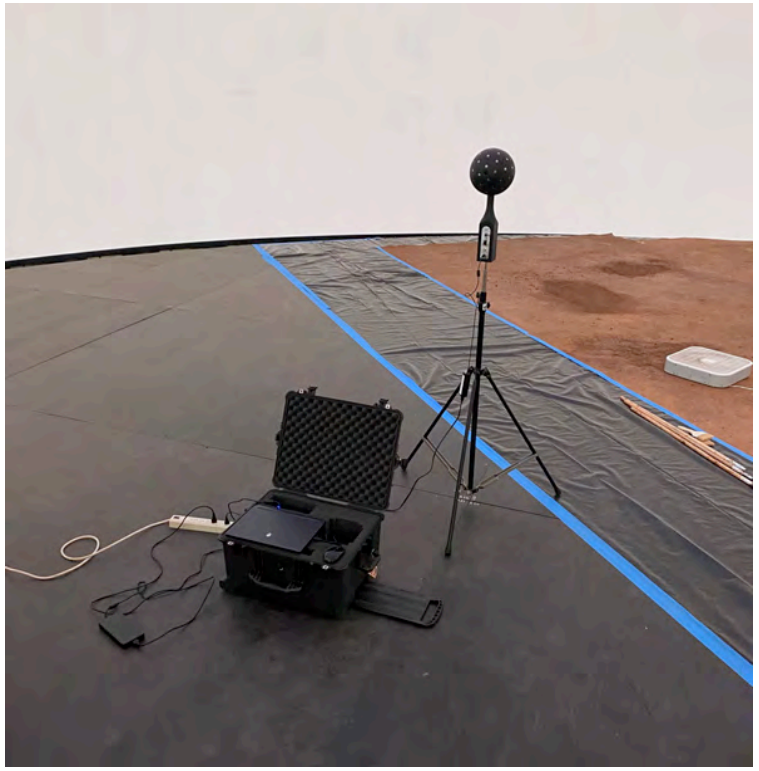
The acoustical equivalent of virtual production's 'final pixel' is 'final sample,' striving to capture and deliver spoken on-set performances directly to audiences, with minimal post processing or ADR . . . zero ADR (ZADR).

Sound Stages?

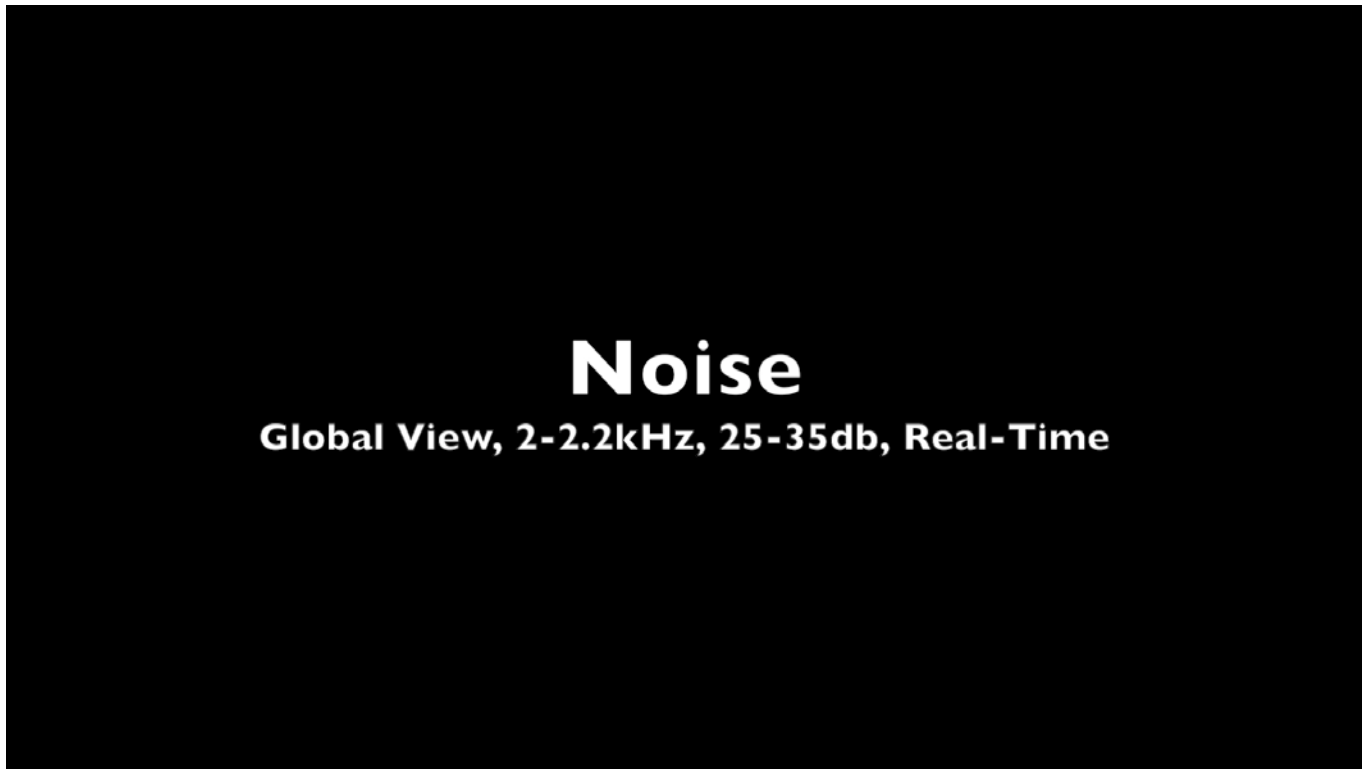


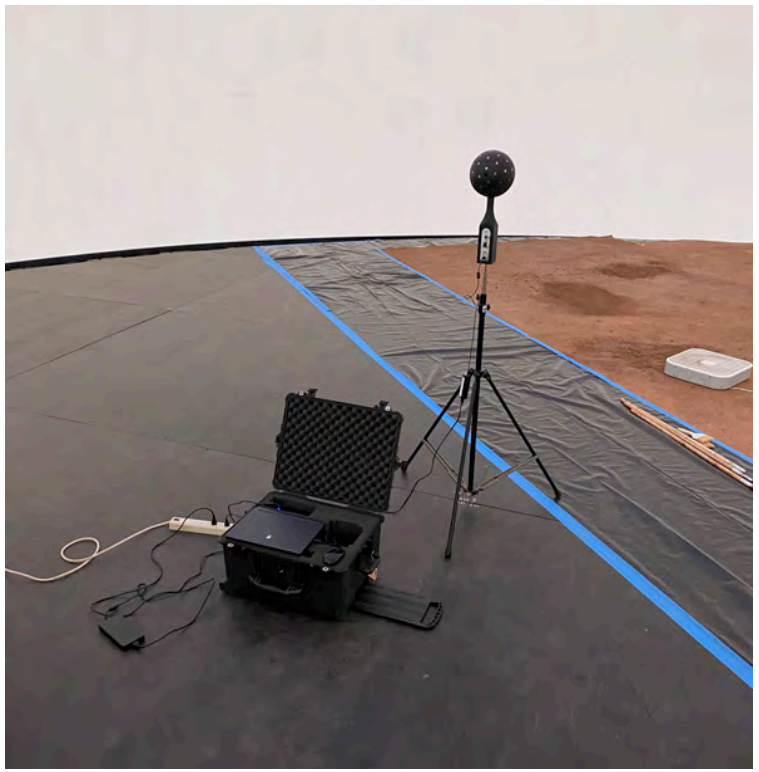
Sound Stages?



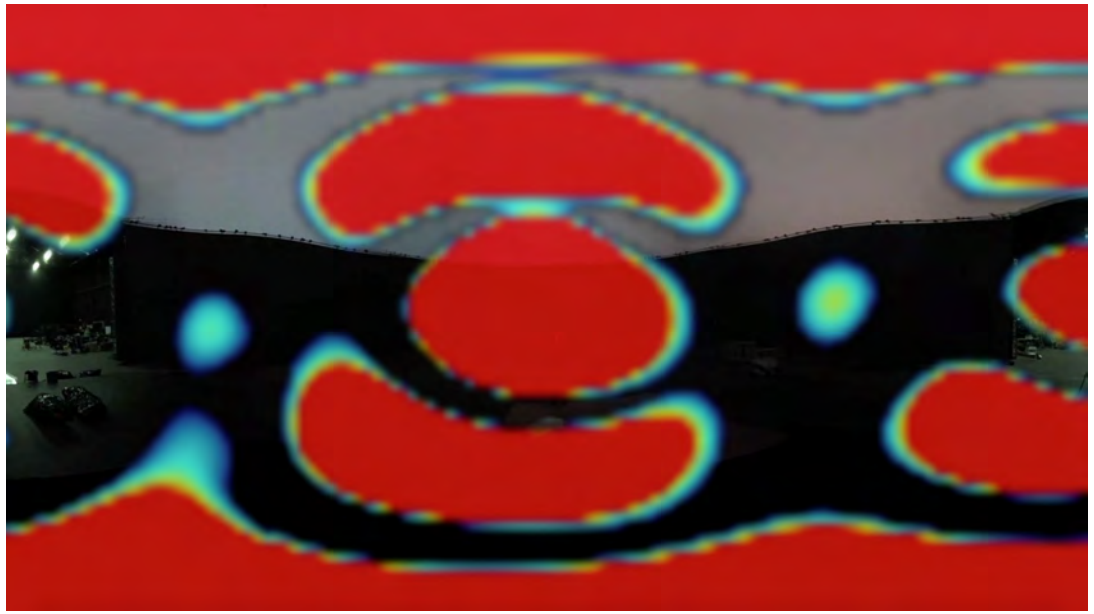


Sound Stages?



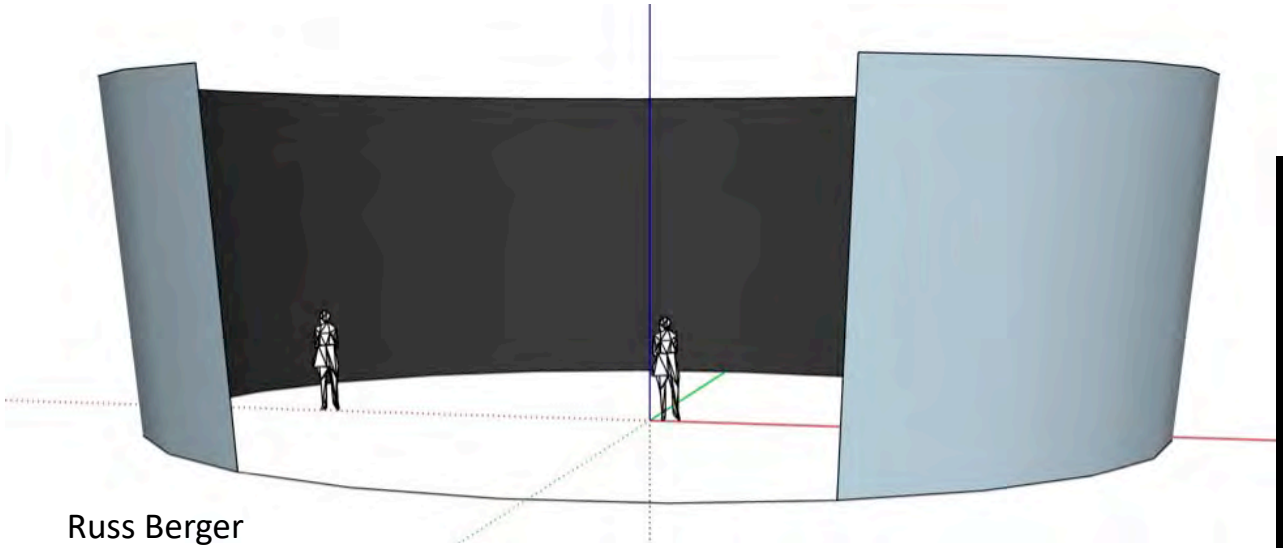


Mitigation

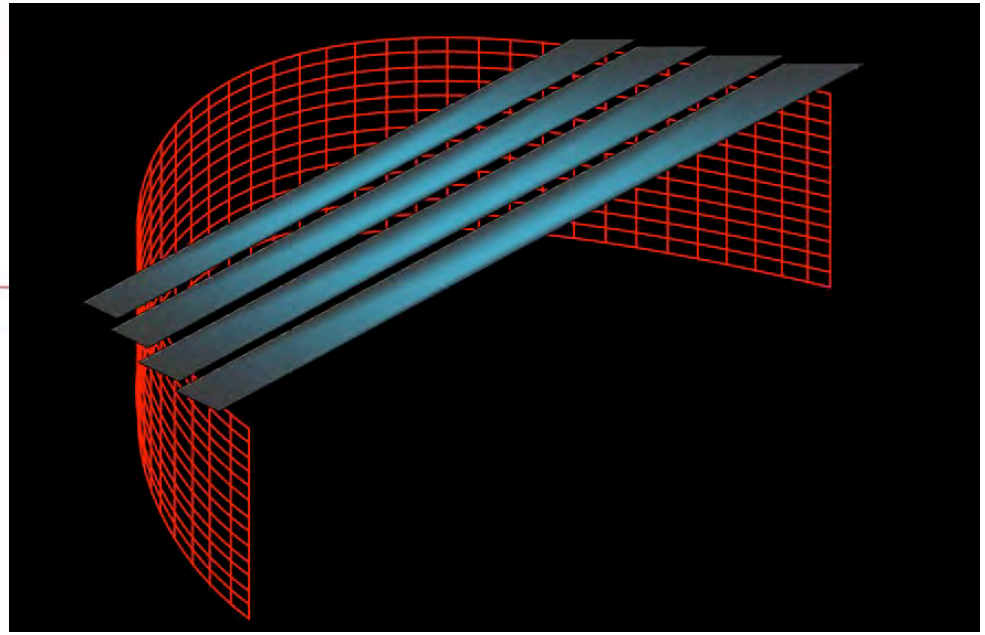


- No Silver Bullets
- Stage & Panel Construction
- Holistic Collaboration
  - Pre-vis
  - Production
  - Post

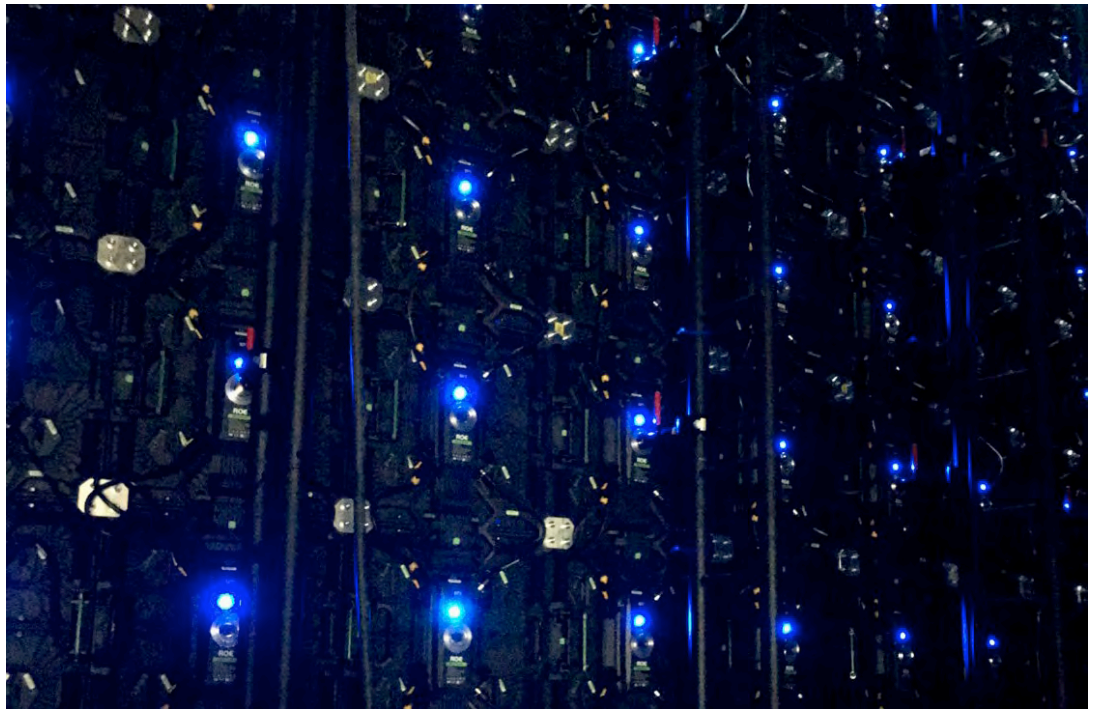
Stage Construction



Russ Berger



Panel Construction



- Reduce Noise Generation (fan)
- Increase Sound Absorption
- Support Pitch Angles
  - Compound Curves
  - Conical Frustum

Virtual Production is PreVis / Tech Vis

- Simulated (Prototype) Production is key to VP success
- Holistic Iterative Collaboration across creative disciplines
- Include Sound early in the process

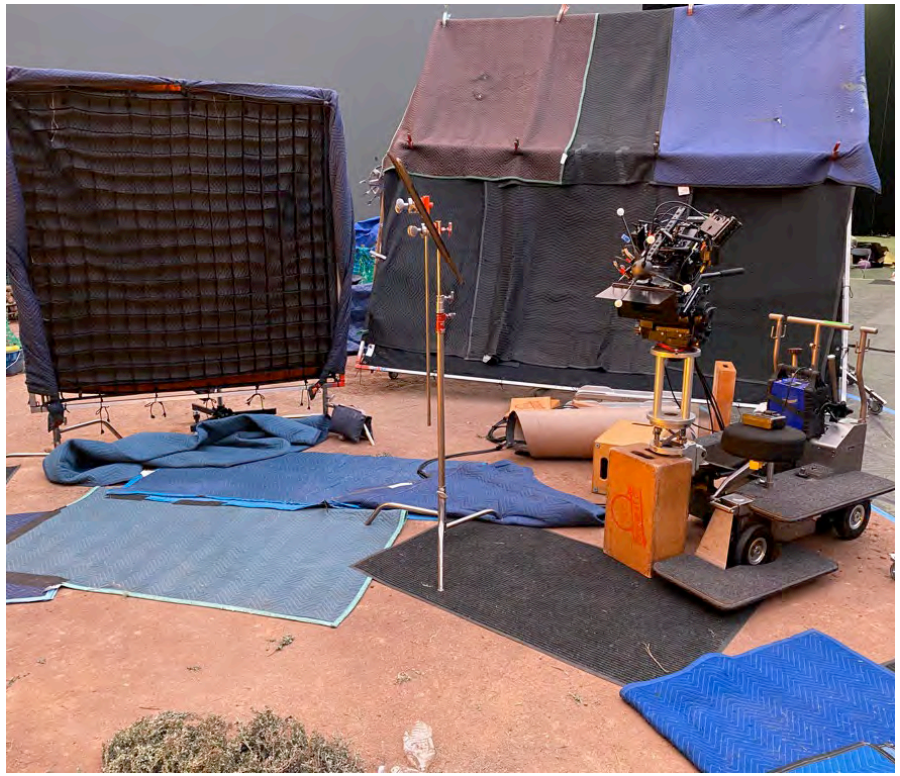
Pre-Visualization Collaboration with Sound

- Set Design & Construction
- Costume Design & Construction
- Mitigation Tools

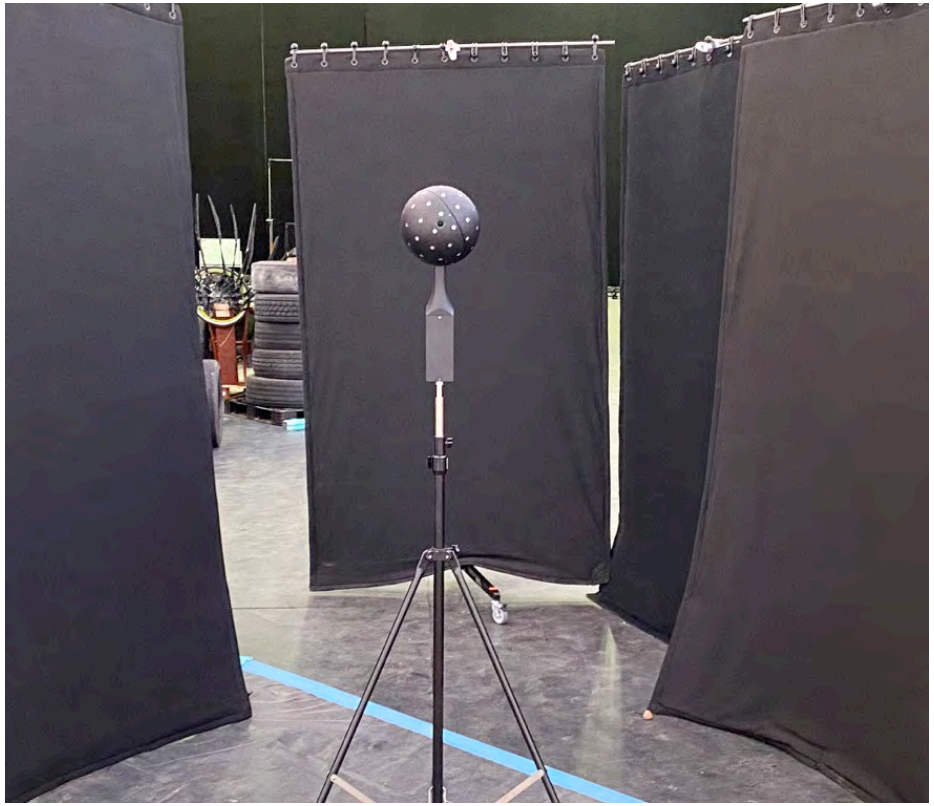
Set Design & Construction

Costume Design & Construction

Mitigation Tools



Mitigation Tools



Production Sound Mixer

- Costume Collaboration
  - Highest Resolution

Chris Robleto-Harvey

- Costume Collaboration
  - Highest Resolution

Post Supervising Sound Editor

- ADR Drawbacks
- Noise Removal
- De-reverberation

Kami Asgar

- ADR Drawbacks
- Noise Removal
- De-reverberation

FUTURE

- **Predictive Tech-Vis**
  - Gaming Engines, Real Space, VRWorks
- **AI Recording Technology**
  - Array Microphones
  - AI

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Thank You

- HPA
- ETC
- Panelists
- Acoustical Experts

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