

# NETVC IETF 93 Hackathon Results

# Metrics

- Daala
  - 12 commits
    - 1 more in review
    - 1 more in progress
  - 4 authors
  - 5 issues filed
  - 2 issues closed
  - PSNR: -0.4%, PSNR-HVS: -0.1%, SSIM: -0.2%, FastSSIM: -0.1%
- Thor
  - AreWeCompressedYet integration
  - 4 combined Daala/Thor experiments run

# Daala with Thor MC

- Daala's motion compensation is very loosely coupled with the rest of the codec
- Ripped it out and replaced it with Thor's
  - Ran whole Thor encoder with residual coding disabled, stuffed output bits into a Daala frame
- Lots of interesting results on AWCY

# Thor's Constrained Low-Pass Filter

- Easy to integrate into Daala
  - So we did!
  - Simple hack with no signaling for now (i.e., cheating)
  - Better patch in progress
- Solves a long-standing “quilting” artifact
  - Found in fades at low rates

# Previous Daala (no CLPF)



# Daala With Thor's CLPF

