Low-Delay Codec: Activity

- Project aim:
  - Transmit audio with very low latency (<10 ms)
  - High-quality speech and music

- Features:
  - From ~32 kbps for speech, ~48 kbps for music
  - Good quality stereo at 128 kbps
  - Small footprint

Low-Delay Codec: Challenges

- Very short frames (<10 ms)

  - Poor frequency resolution, leakage

  - Very few bits for meta information (every bit counts)

- Patents, patents, patents

- Math-intensive

Low-Delay Codec: Dependencies

- Libraries in use:
  - No dependency
  - But reusing Timothy's entropy coding code
- Projects that *would* depend on us:
  - Pulseaudio
  - VoIP apps
  - Software for remote live performances

Low-Delay Codec: Next Steps

- Find a good name

- Lots of things to add

    - Psycho-acoustics/bit allocation

    - Multi-channel support (for N>2)

- Finalise bit-stream over the next 12 months

- Convert code to fixed-point