# Speex Development and Applications

Bernard Blackham

`bernard@blackham.com.au`

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  - ★ Ogg container format

# Some numerical comparisons

- Quality vs size

| Mode | Kbytes/second |
|---:|:---:|
| Ultra-wideband (32000 Hz) | 4.56 |
| Wideband (16000 Hz) | 3.57 |
| Narrowband (8000 Hz) | 1.97 |

- 16000 Hz is adequate for most applications

# Other choices

- `--quality`

- `--comp`

- `--vbr` and `--abr`

- `--vad` and `--dtx`

# Using Speex

- `speexenc/speexdec`

- Sweep

- ... ?

- Icaspeex

# Speex at Linux.conf.au 2003

- In each venue:

    - Pentium 233Mhz, 32 MB memory
    - 16 kHz wideband recordings

# Speex Applications

- Gnome meeting

- Linphone

- Asterisk

- Sweep

# More applications

- JRoar

- Embedded devices (DSPs)

- more http://speex.org/projects.html

# The future

- ACM codec

- fixed point version

- room for optimization

# More information

- `http://www.speex.org/`