

# **IEE1711 Applied signal processing**

## **Practice 4**

Julia Berdnikova

julia.berdnikova [ät] ttu.ee

# Task 1 (1)

## FM receiver design in **GNURadio**:

- Find the FM radio station frequency and bandwidth (Google, HDSDR)
- Read about GNURadio decimation in Filters and Rational Resampler block
- Calculate the necessary resampling ratio
- Filter one station FM bandwidth

# Task 1 (2)

- Add FM receiver (WBFM receive block)
- Play the realtime radio with Audio Sink

# Report should include

- Title page
- GNURadio screen capture
- Spectrum and spectrogram of the FM radio signals
- Filtered FM signal spectrum and spectrogram
- Conclusion