#### Wireless receivers: algorithms and architectures

Fall Semester

Telecommunications Circuits Laboratory

**EPF** Lausanne

# 1 Common Issues

## 1.1 Microphone Setup

### 1.1.1 Adaptive Gain Control on Windows

**Symptom** The microphone input volume is automatically adjusted by the operating system. The received constellation has a good SNR at first and then shrinks.

**Solution** Disable the automatic gain control in the microphone settings.

- Right click on the speaker icon in the taskbar and select **Sound**.
- Open the **Recording** tab
- Right click on the loudspeaker and select Property
- Under Custom un-tick AGC

#### 1.1.2 Noise Cancellation

**Symptom** The transmitted signal does not appear in the recording plot (no matter the volume).

**Solution** Use the provided microphone or disable any noise cancellation feature in the microphone settings of your computer.