ECG – improving R waves’ identification

- Depending on the electrodes placement, T and R waves of the ECG may be similar in amplitude.
- This could be problematic to detect R waves and quantify Inter Beat Interval (IBI) since employed algorithms may not differentiate between the two.
- Fortunately, T and R waves’ frequencies are not equivalent
  - Use a high pass filter > 6-7 Hz to keep R waves, or
  - Uses a low pass filter < 6-7 Hz to keep T waves.

Note that it is advisable to confirm filter’s cut-off by checking the ECG frequencies using FFT or power spectral density

- **WARNING:**
  - May influence R and T amplitudes
  - May/should be adjusted as a function of signal quality and participant