



Figure 15: A sound wave propagating at high amplitudes causes a characteristic steepening of the wave front

3.1.8. Wave Steepening

At high amplitudes a sound wave propagates at the maxima faster than at the minima causing a gradual steepening of the wave front [13]. This mechanism is found in horn loaded compression drivers. The nonlinear mechanism is basically a multiplication of the sound pressure with the differentiated sound pressure in each section of the horn [14] - [16].