

Medientechnik

Audio

Monospur

Abtastrate: 22000 Hz

Sampleformat: 8 Bit

Länge: 2:30 Minuten

Größe in Kilobyte?

Datengröße

<http://code.google.com/p/calculator/wiki/Answer>



22000 Abtastungen pro Sekunde: $22000 * 8 \text{ Bit} = 176000 \text{ Bit}$

Länge ist 2:30 Minuten: $176000 * (60+60+30) = 26400000 \text{ Bit}$

Bit => Byte: $26400000 / 8 = 3300000$

Byte => Kilobyte: $3300000 / 1024 = \mathbf{3222,65625}$

Monospur

Abtastrate: 44100 Hz

Sampleformat: 8 Bit

Datenrate in kB/s ?

Datenrate



44100 Abtastungen pro Sekunde: $44100 * 8 \text{ Bit} = 352800 \text{ Bit}$

Bit => Byte: $352800 / 8 = 44100$

Byte => kByte: $44100 / 1024 = \mathbf{43,06640625}$

MP3s



<http://www.userinterfaceicons.com/preview.php>

Material zur Funktionsweise von MP3s:

www.leidinger.net/publications/Audiokompression

www.tecchannel.de/test_technik/grundlagen/401060/mp3_grundlagen_psychoakustik/

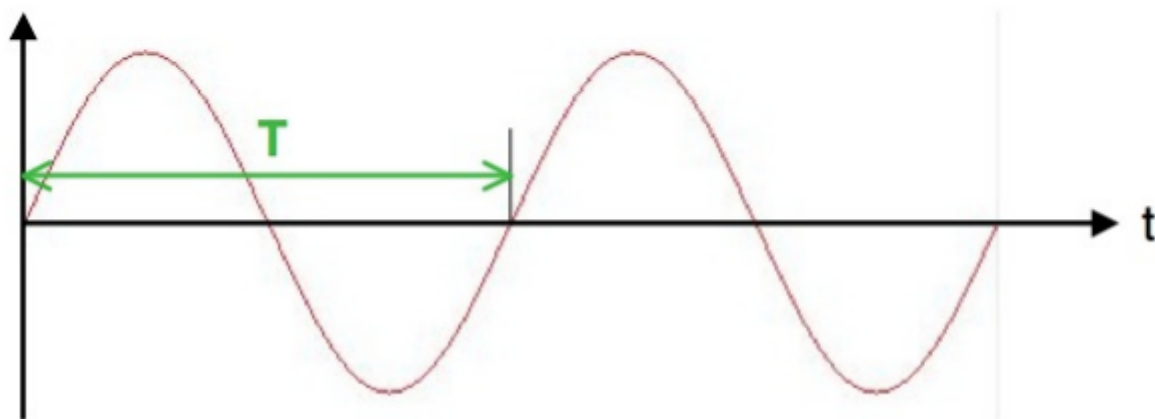
Frequenz & Schwingungsdauer



<http://www.userinterfaceicons.com/preview.php>

Periodendauer T in Sekunden, Frequenz f in $\text{Hz} = 1/\text{s}$
siehe auch Vorlesung Digitale Medien

Wiederholung aus der Vorlesung

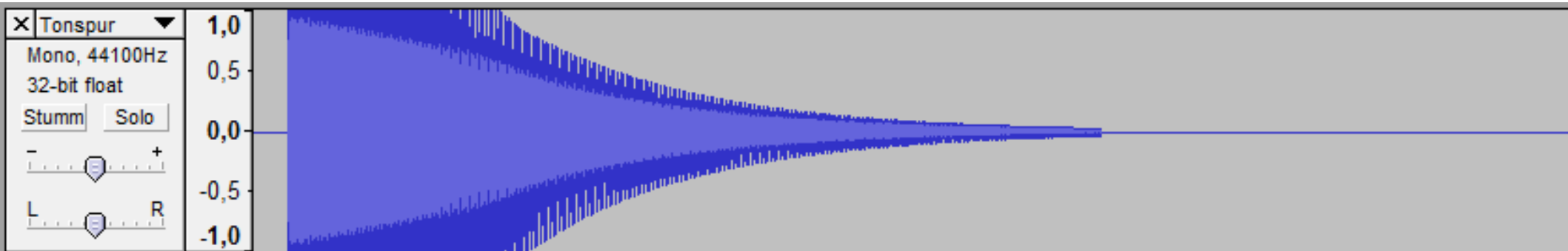
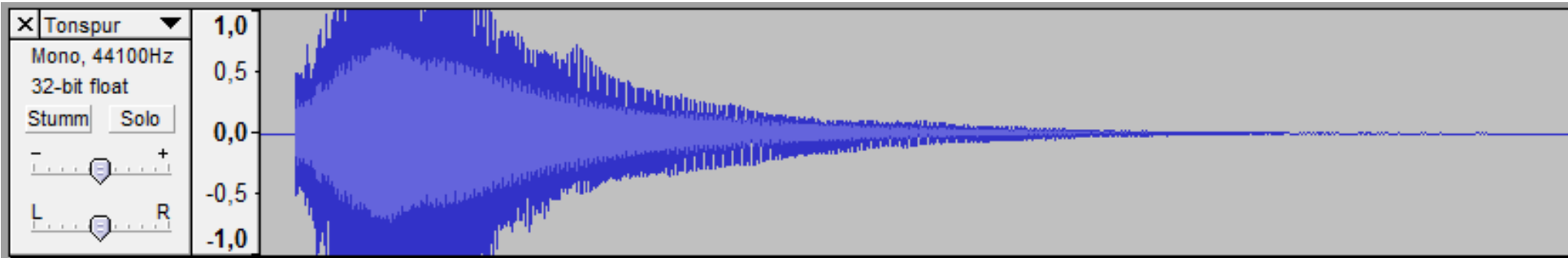
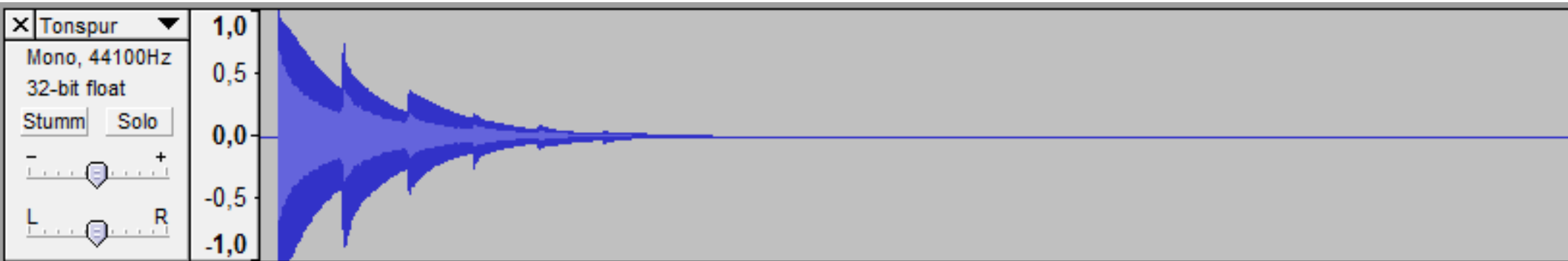
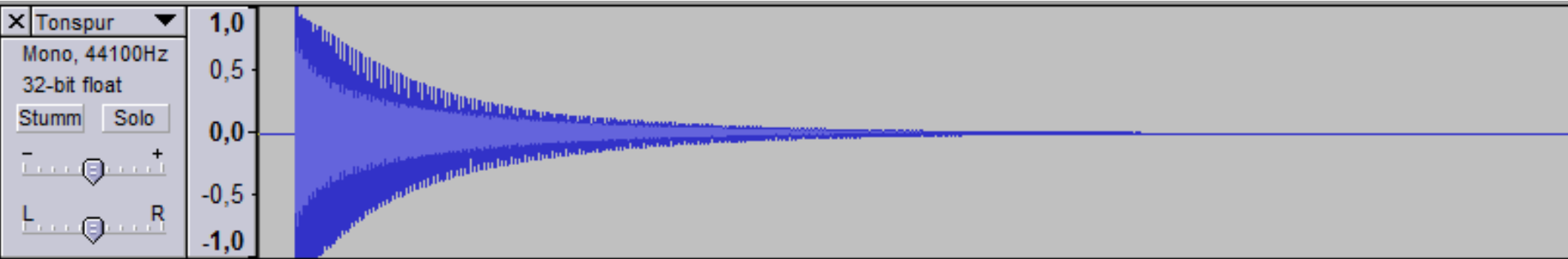


$$T = \frac{1}{f}$$

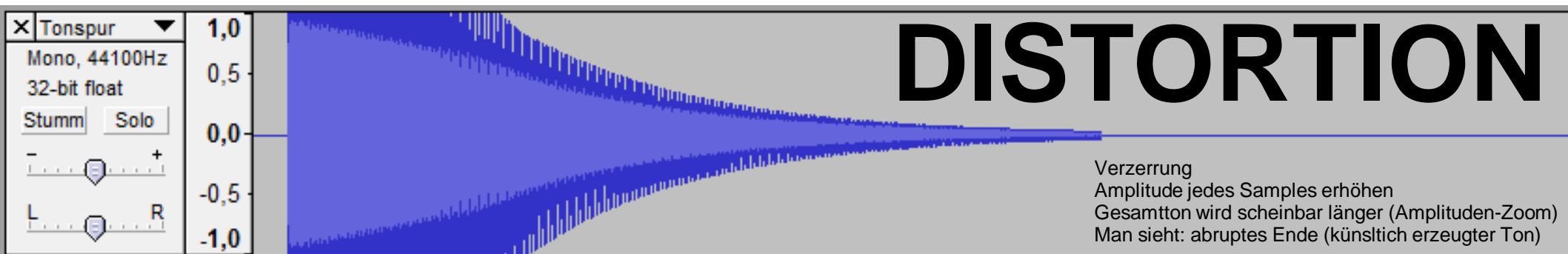
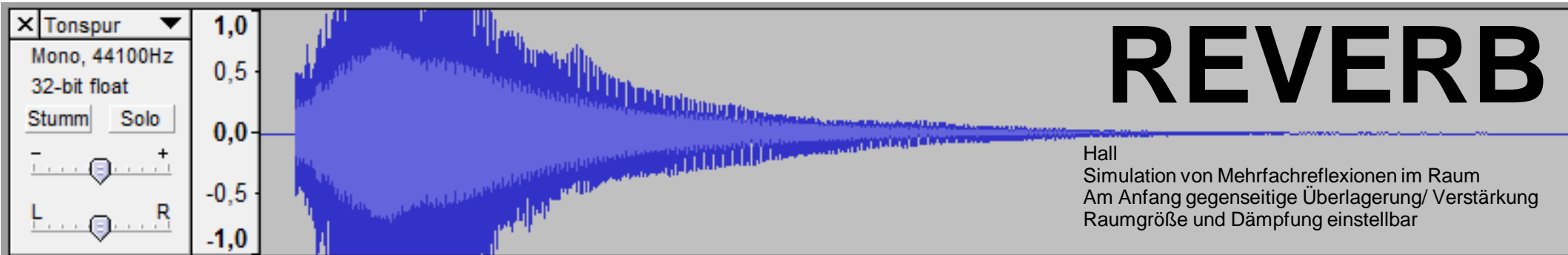
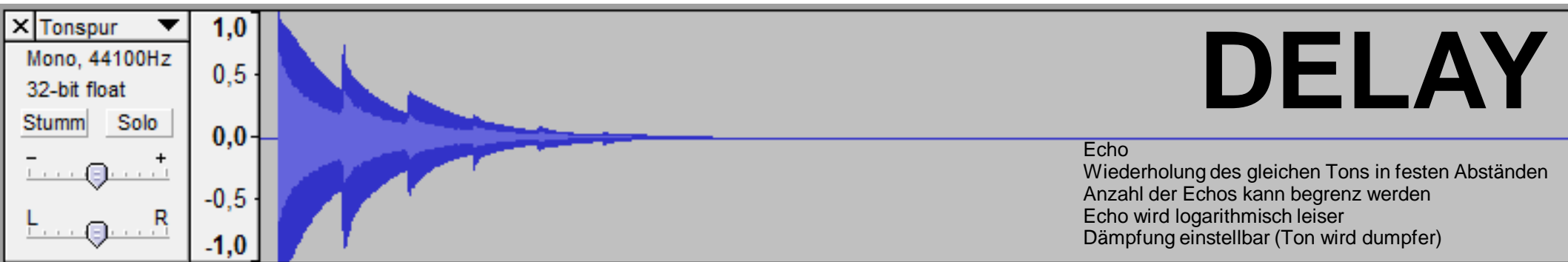
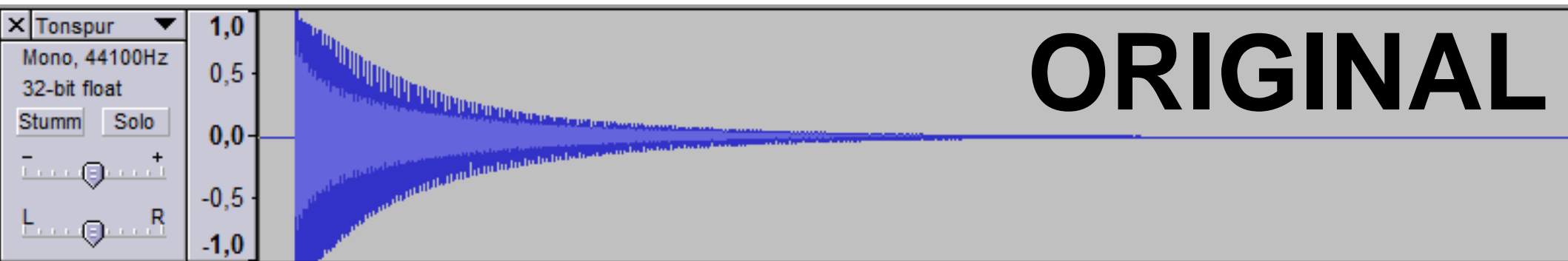
$$1 \text{ Hz} = 1/\text{s}$$

Sinus-Signal

Effekte



Effekte



Geräuschemacher

Foley Artists



Vielen Dank!