5.6.4 Jatkuvan Fourier-muunnoksen estimointi

“Secondly, as we shall now show, we can use the discrete Fourier transform to estimate the continuous Fourier transform of a continuous-time signal.”

“…our estimate of the Fourier transform $F(\mathrm{j}\omega)$ of $f(t)$ over the interval

$$0 \le t \le (N-1)\,T$$

will … be the sequence of …

$$\ldots = T \sum_{k=0}^{N-1} f_k \, \mathrm{e}^{-\mathrm{j}kn\Delta\omega T}$$

which, from … (5.78), gives

$$\ldots = T \times \mathrm{DFT}\{f_k\}$$

where $\mathrm{DFT}\{f_k\}$ is the discrete Fourier transform of the sequence $\{f_k\}$.”

- arvojen $F(0)$, $F(\mathrm{j}\Delta\omega)$, …, $F(\mathrm{j}(N-1)\Delta\omega)$ likiarvoiksi tulevat siis kaavalla (5.78) saatavat arvot $T\,F_0$, $T\,F_1$, …, $T\,F_{N-1}$

- MIKSI tarvitaan tuo kertominen T:llä, näkyy kalvolla **JonoilleF**.