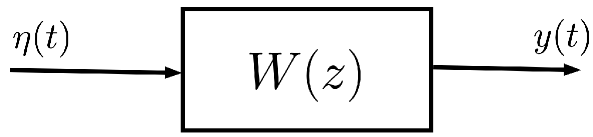
Hands-On: Power Spectra & Spectral Factorization

Spectral Factorization



A stationary stochastic process $y(t)$ has the power spectrum

$$\Gamma_y(\omega) = \frac{50}{29 - 20\,\cos(\omega)}$$

Find the LTI filter $W(z)$ that creates $y(t)$ by filtering the white noise $\eta(t)$, and find the variance of the white noise σ_η^2.

Hint: analyse and reuse the code in this live script.

```
clear
close all
clc


% put here your code
```