

## Notebook for PSB

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$$360^\circ \times \frac{60}{1200} = + - 18$$

$$r = 1 - \left( \frac{10}{1200} \right) \times \pi = 0.9738$$

$$H(z) = \frac{(z - e^{-j18}) \times (z - e^{j18})}{(z - 0.9738 \times e^{-j18}) \times (z - 0.9738 \times e^{j18})} = \frac{z^2 - 1.9021 \times z + 1}{z^2 - 1.8038 \times z + 0.9483} =$$

$$\frac{1 - 1.9021 \times z^{-1} + z^{-2}}{1 - 1.8038 \times z^{-1} + 0.9483 \times z^{-2}} = \frac{x[z]}{y[z]}$$

$$y[n] = x[n] - 1.9021 \times x[n-1]x[n-2] + 1.8038 \times y[n-1] - 0.9483 \times y[n-2]$$

$$a_1 = -1.8038$$

$$a_2 = 0.9483$$

$$b_0 = 1$$

$$b_1 = -1.9021$$

$$b_2 = 1$$