DDM - lab 4 report

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April 3, 2025

1 Objective

The objective of this lab session is to establish a parametric model of a system and to understand the effects of the order of the chosen model. To do this, the least squares estimate $\hat{\theta}$ is computed wit different dimensions by constructing the corresponding regressor matrix H_n and then evaluating the model using the value of the LS cost function.

2 Remarks for report writing

A higher SNR gives a higher n_{opt} as there is no risk of overfitting if there is no noise. It means that even with a higher order, the model won't change in a non-noisy dataset.
Decreasing the bandwidth will make the TF more complex -¿ more parameters needed to fit it