# Lab 2 Report

## Ruijie Song

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Section 1 Report:

1.



Figure 1. The gray scale image img04g.tif.

2.

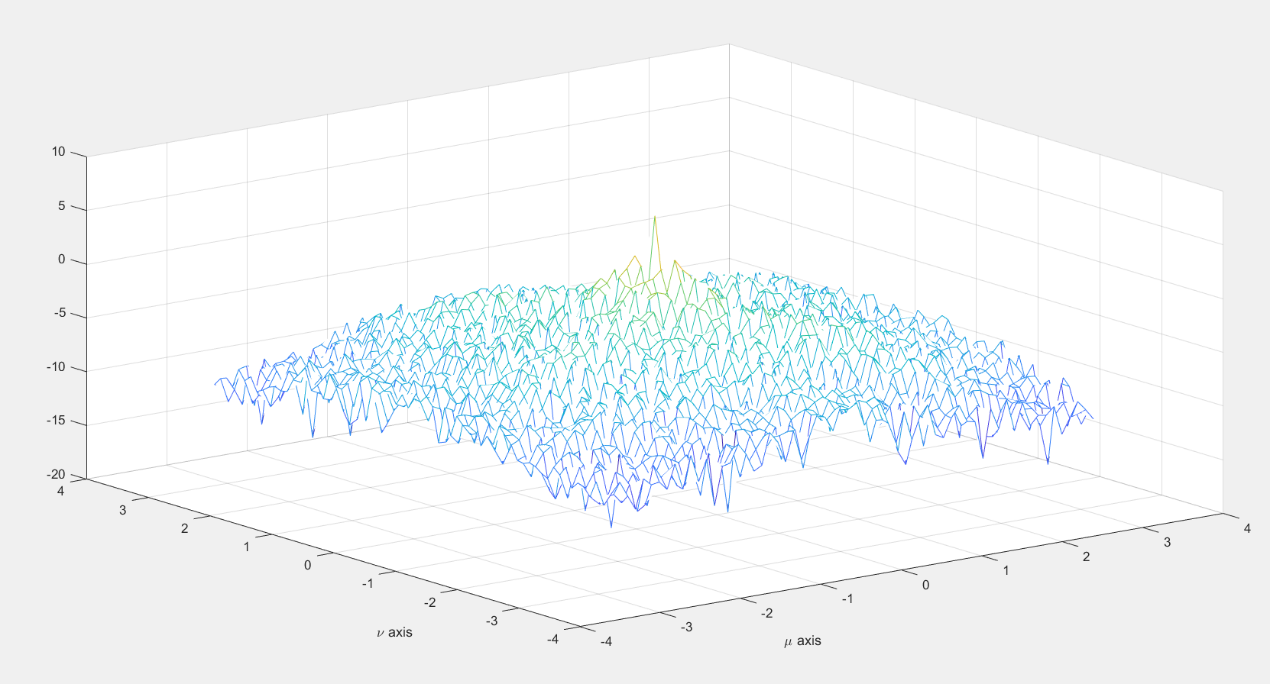


Figure 2. The power spectral density plots for block sizes of 64 × 64

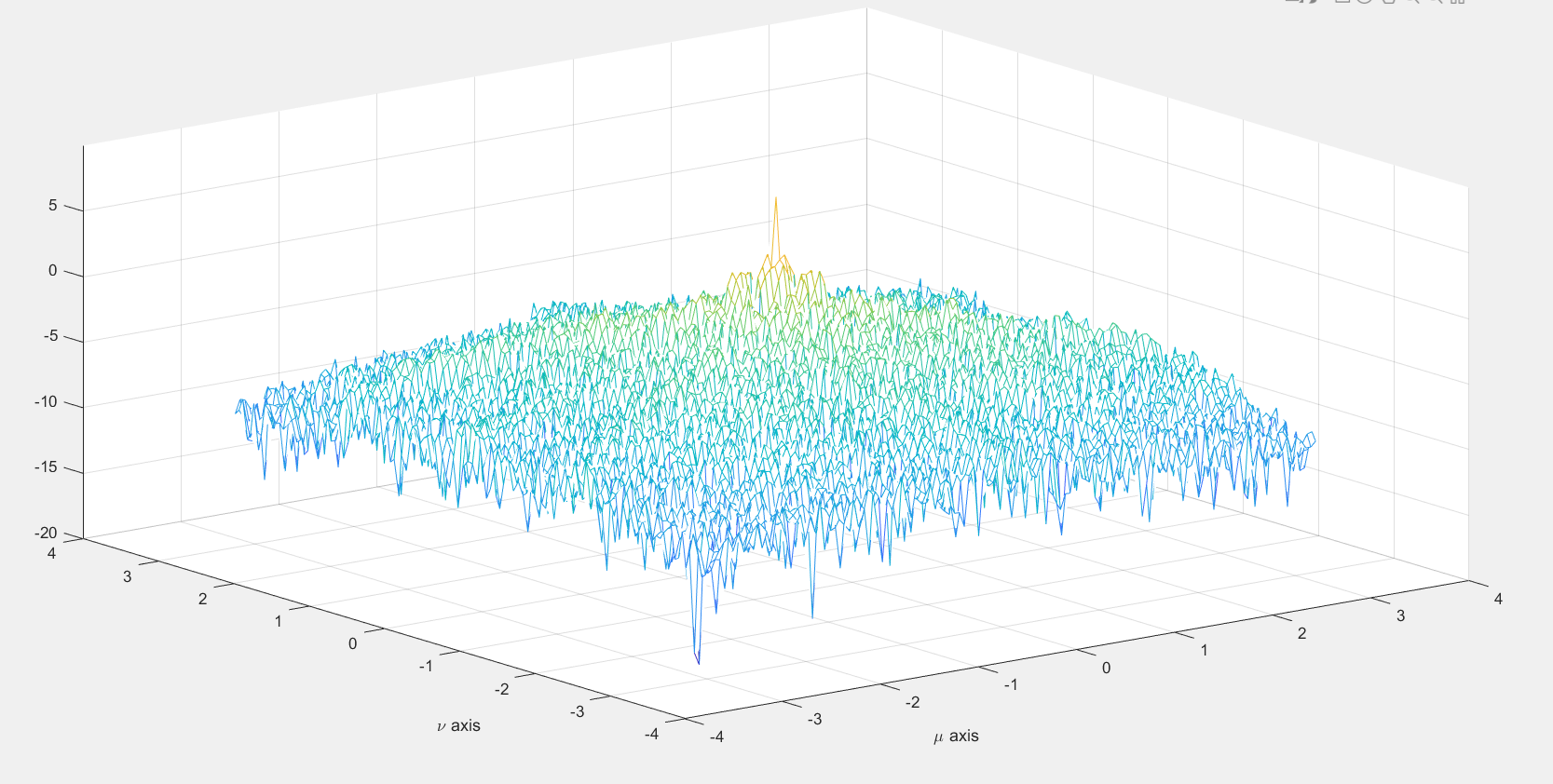


Figure 3. The power spectral density plots for block sizes of 128 × 128

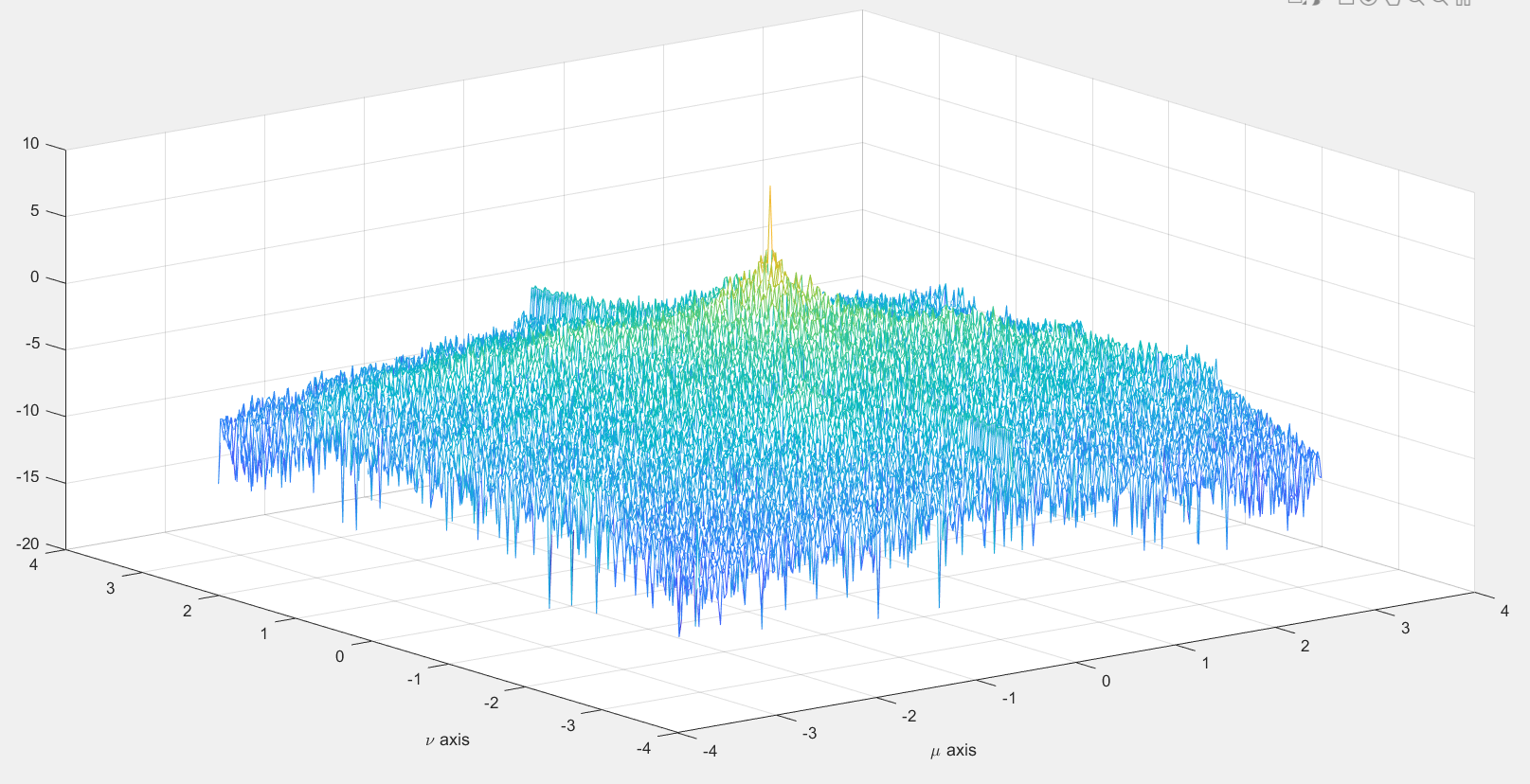


Figure 4. The power spectral density plots for block sizes of 256 × 256

3.

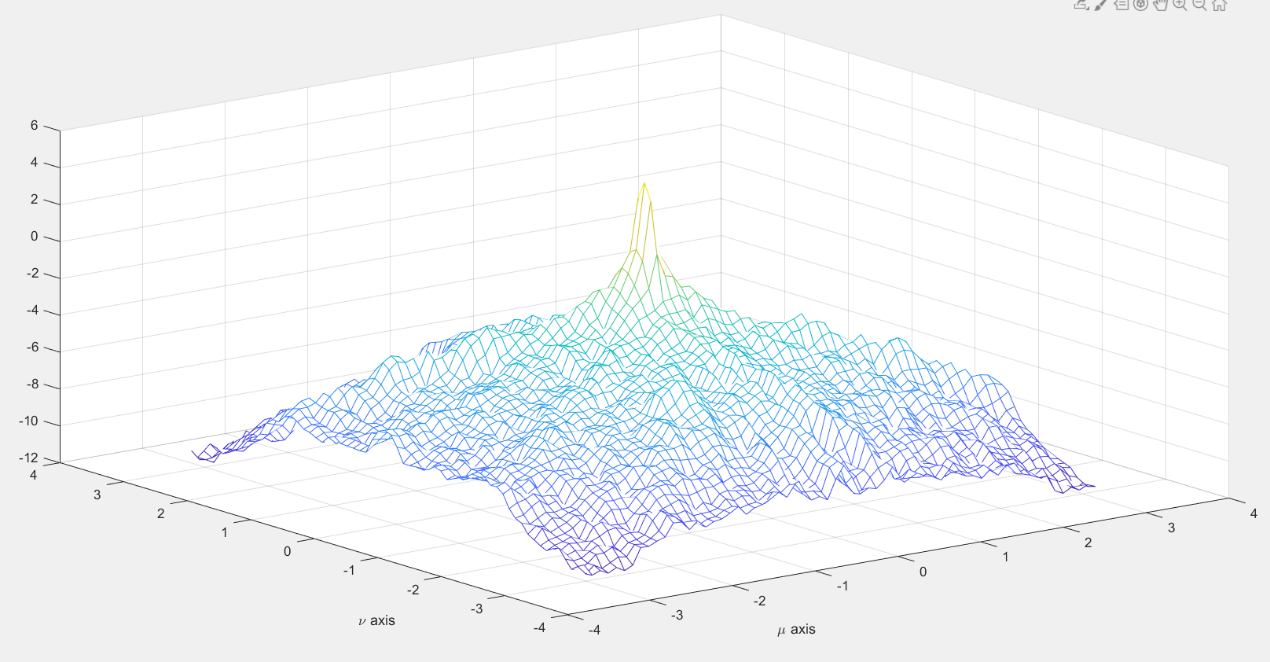


Figure 5. The improved power spectral density estimate.

2 Power Spectral Density of a 2-D AR Process

1.

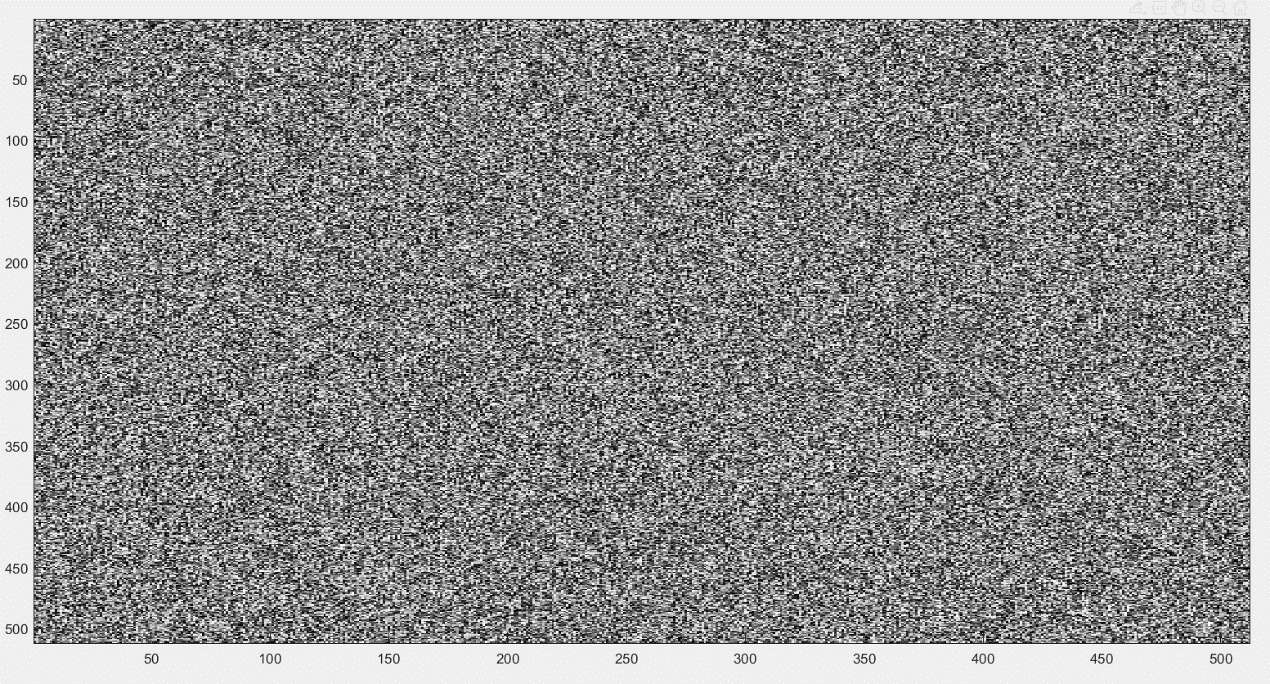


Figure 6. The image 255 ∗ (x + 0.5).

2.

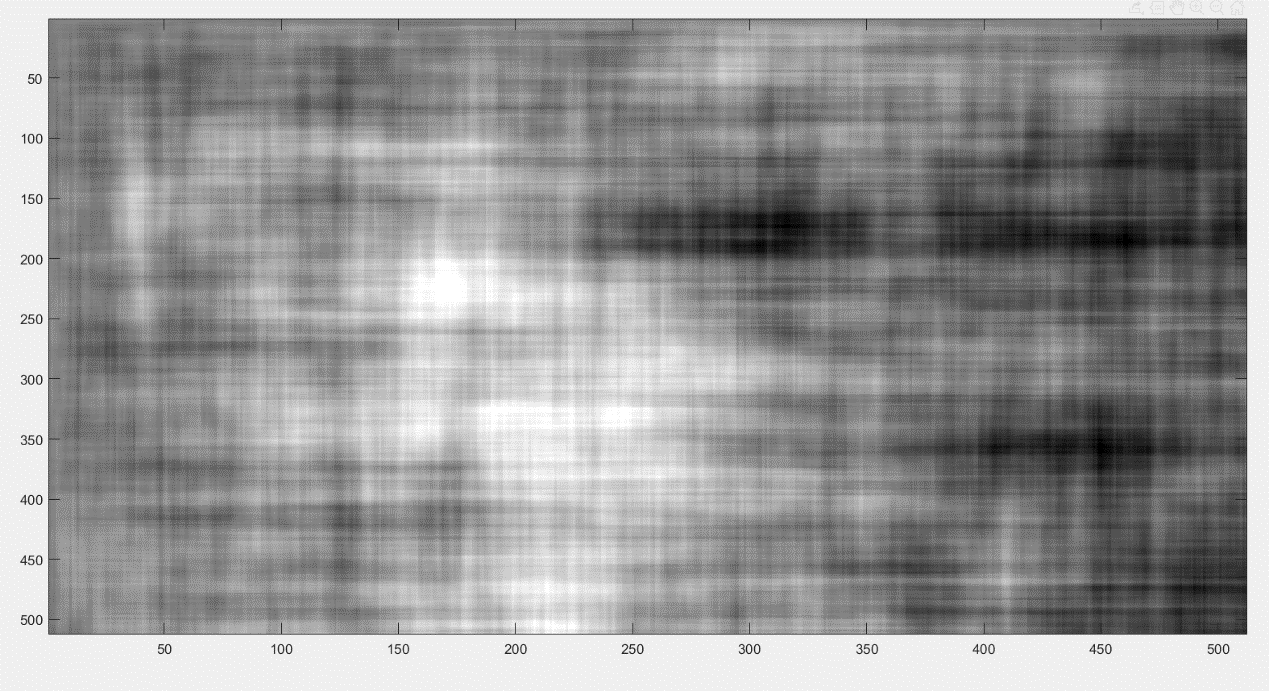


Figure 7. The image y + 127.

3.

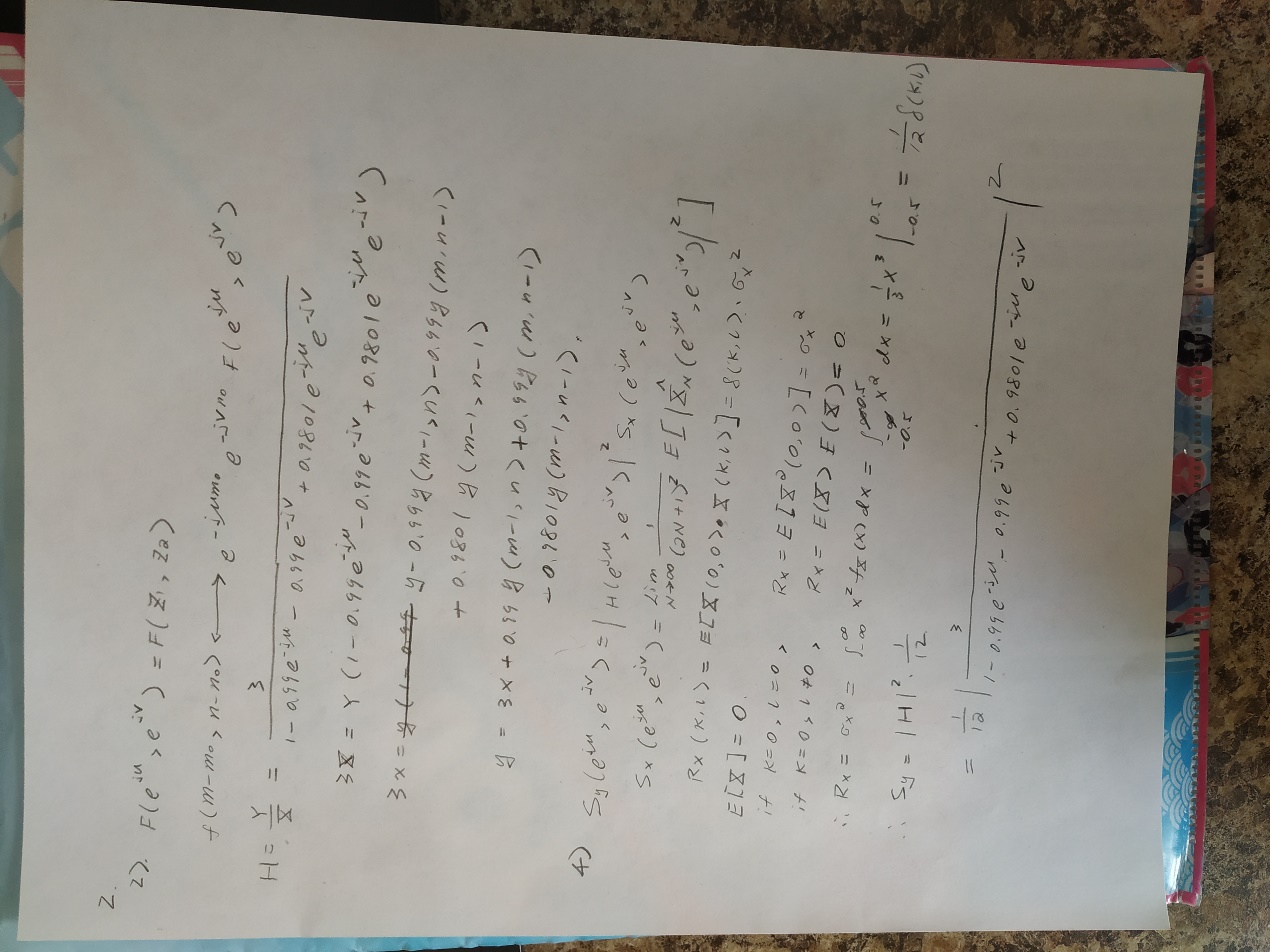


Figure 8. Theoretically calculate Sy

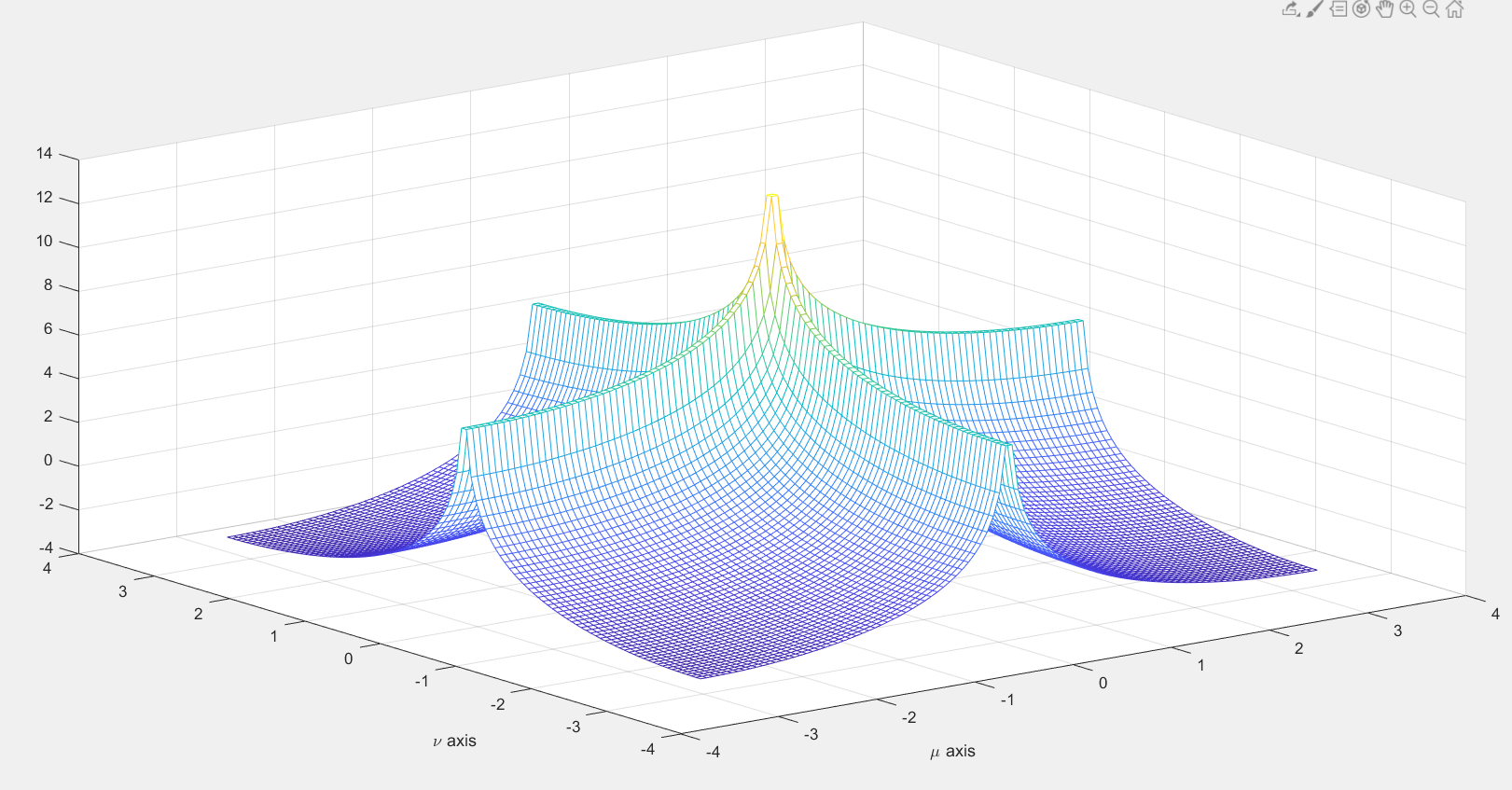


Figure 9. A mesh plot of the function log Sy

4.

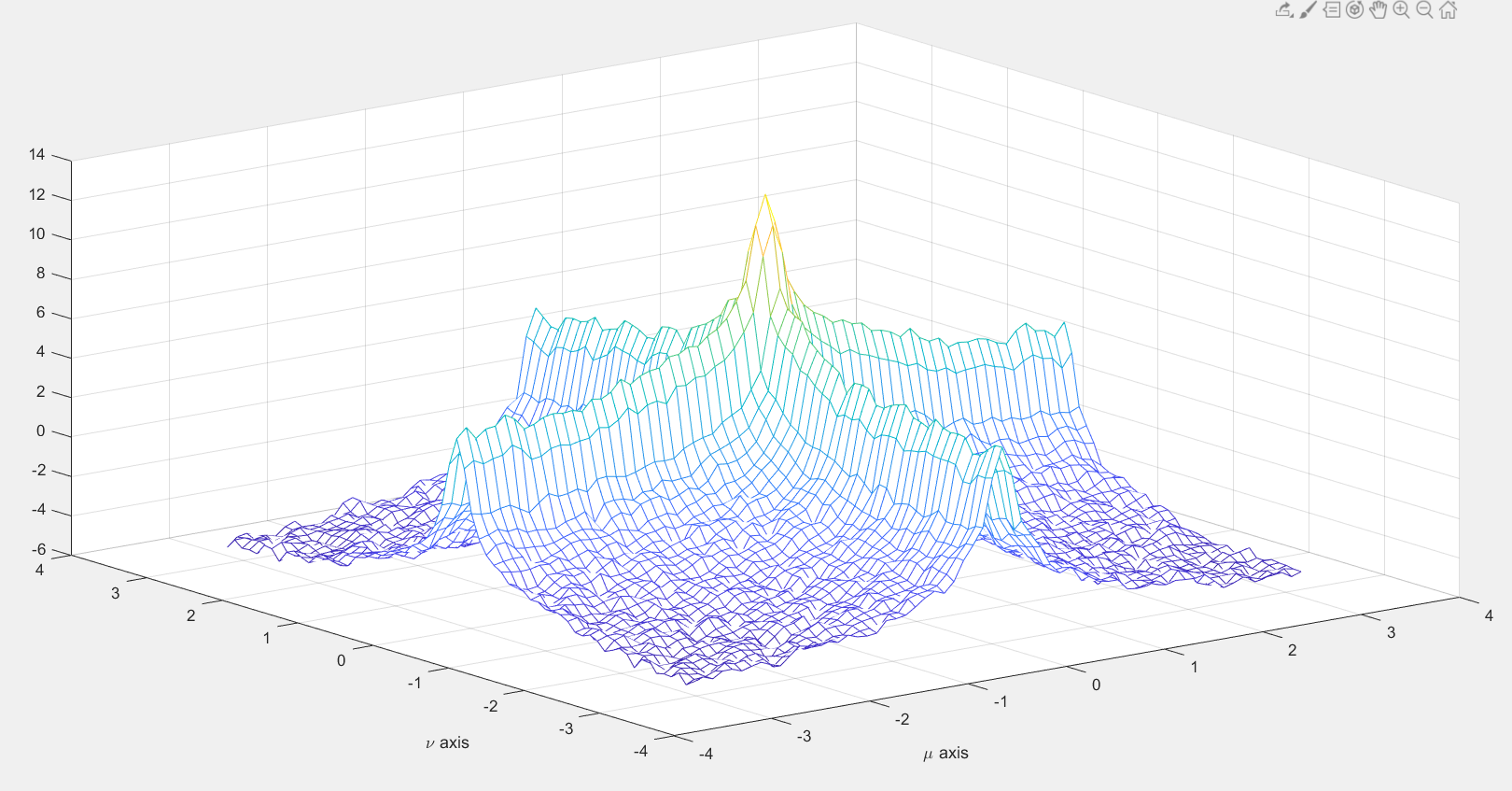


Figure 10. A mesh plot of the log of the estimated power spectral density of y using BetterSpecAnal(y)