

A Search for Sterile Neutrinos at the NO ν A Far Detector

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ABSTRACT

We measured things. And searched for other things. Here is what we found, please let me graduate.

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THIS IS THE DEDICATION.

Acknowledgments

These people were cool.

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A Brief History of Neutrinos

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1.2 FIRST DETECTION OF NEUTRINOS

1.3 FIRST OF EVIDENCE OF OSCILLATIONS

1.4 POSSIBLE EVIDENCE OF STERILE NEUTRINOS

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2.1 STANDARD 3-FLAVOR OSCILLATIONS

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3.3.1 NEAR DETECTOR

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6.2 CVN BASED SELECTION

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Neutral Current Disappearance Analysis

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7.2 NEAR DETECTOR DECOMPOSITION

7.3 EXTRAPOLATION

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Analysis Results and Systematic Errors

8.1 FITTING METHOD

8.2 SYSTEMATIC ERRORS

8.3 RESULTS

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Conclusions and Future Improvements

9.1 CONCLUSIONS

The results of this analysis are consistent with no sterile neutrinos.

9.2 FUTURE IMPROVEMENTS

References



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