

GREAT CONTRIBUTION TO THE FIELD OF THINGS

THESIS

John Smith, First Lieutenant, USAF

AFIT-ENG-MS-XX-X-XXX

**DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY**

AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, OH 45433

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THESIS

Presented to the Faculty

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Air Education and Training Command

in Partial Fulfillment of the Requirements for the
Degree of Master of Science in Electrical Engineering

John Smith, B.S.E.E.
First Lieutenant, USAF

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Keywords: earth; water; air; fire

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To the one who loves me most.

Acknowledgments

I would like to thank the entire committee for your great support.

John Smith

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I. Introduction

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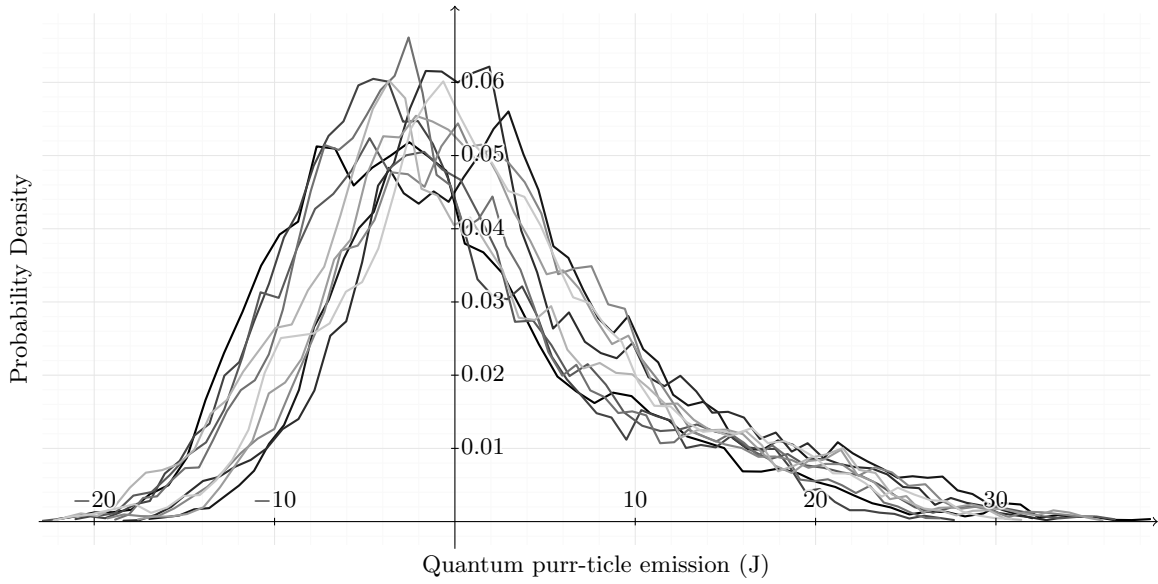


Figure 1. Histogram of the emission energy for each of the data collects.

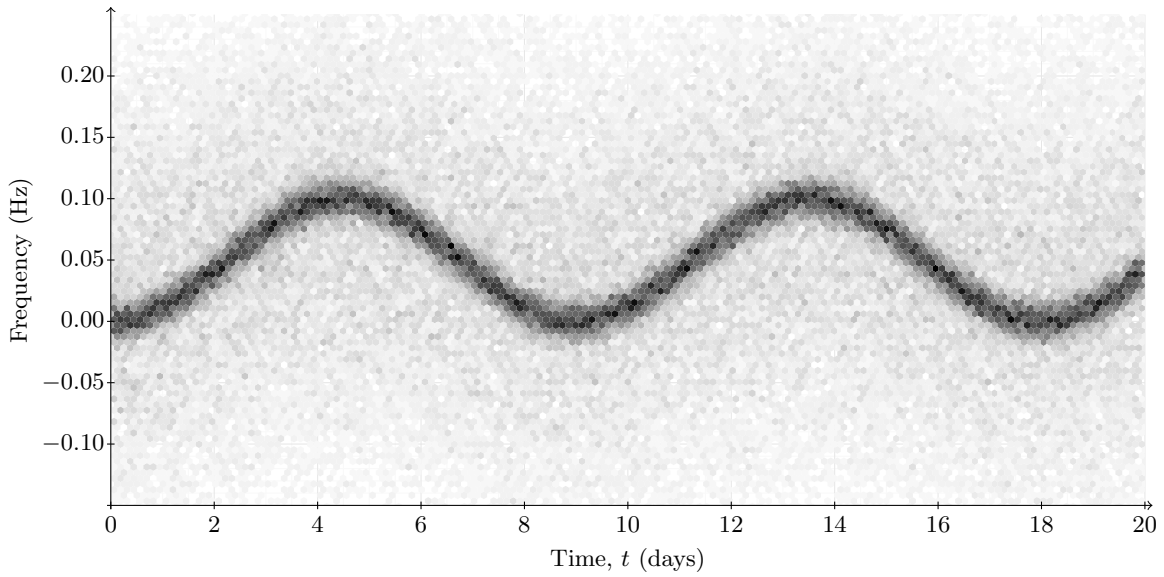


Figure 2. Spectrogram of the emission energy over the 20-day period.

II. Literature Review

Contents of Chapter II, typically includes background and literature review

III. Methodology

Contents of Chapter III, typically the methodology

IV. Results and Analysis

Contents of Chapter IV, typically the analysis

V. Conclusion

Contents of Chapter V, typically the conclusion and future work

Appendix A. List of Acronyms

The Air Force Institute of Technology Style Guide permits putting your lists of acronyms, symbols, and such into the appendices section of your paper.

AFIT Air Force Institute of Technology

ENC Department of Mathematics and Statistics

ENG Department of Electrical and Computer Engineering

ENP Department of Engineering Physics

ENS Department of Operational Sciences

ENV Department of Systems Engineering and Management

ENY Department of Aeronautics and Astronautics

Bibliography

- Poor, W. A. (1989). A geometric description of wander azimuth frames. *Journal of the Institute of Navigation*, 36(3).
- Savage, P. G. (2000). *Strapdown analytics ii, part 1*. Strapdown Associates.
- Savage, P. G. (2015). Computational elements for strapdown systems. *Strapdown Associates, Inc.*

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