



ZJU-UIUC INSTITUTE

Zhejiang University-University of Illinois at Urbana-Champaign Institute
浙江大学伊利诺伊大学厄巴纳香槟校区联合学院

ECE 459

COMMUNICATION SYSTEMS

PROJECT REPORT #1

A SAMPLE FOR REPORTS WITH ANY TYPE YOU WANT

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1 Introduction

1.1 Problem statement

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1.2 Importance



Figure 1.1 The logo of ZJU-UIUC Institute.

1.3 Literature Review

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.[1], [3], [4].

$$f(x) = \sum_{n=0}^{\infty} \frac{1}{n!} f^{(n)}(x_0) (x - x_0)^n, x \in U(x_0) \quad (1.1)$$

$$\begin{aligned}e^{ix} &= 1 + ix + \frac{1}{2!} (ix)^2 + \frac{1}{3!} (ix)^3 + \cdots \frac{1}{n!} (ix)^n + \cdots \\&= 1 + ix - \frac{1}{2!} x^2 - i \frac{1}{3!} x^3 + \frac{1}{4!} x^4 + i \frac{1}{5!} x^5 - \cdots \\&= \left(1 - \frac{1}{2!} x^2 + \frac{1}{4!} x^4 - \cdots \right) + i \left(x - \frac{1}{3!} x^3 + \frac{1}{5!} x^5 - \cdots \right) \\&= \cos x + i \sin x\end{aligned}\tag{1.2}$$

2 Methodology

Test the ability to print some units, say (in texts), $10 \times 10^5 \mu\text{m} \cdot \Omega \cdot ^\circ$.

It also applies to equations,

$$R_t = 10 \times 10^5 \mu\text{m} \cdot \Omega \cdot ^\circ \tag{2.1}$$

3 Results

4 Discussion

5 Conclusion

References

- [1] Y. Li and J. Fang, “[New Method of Determining Excess Carrier Bipolar Mobility],” *[Chinese Journals of Semiconductors]*, vol. 20, no. 12, pp. 1129–1131, Dec. 1999. [Online]. Available: <http://www.jos.ac.cn/fileBDTXB/oldPDF/2005092734449173.pdf>.
- [2] J. R. Haynes and W. Shockley, “The Mobility and Life of Injected Holes and Electrons in Germanium,” *Physical Review*, vol. 81, no. 5, pp. 835–843, Mar. 1, 1951. DOI: 10.1103/PhysRev.81.835.
- [3] J. A. Prufrock, *Lasers and Their Applications in Surface Science and Technology*, 2nd ed. New York, NY: McGraw-Hill, 2009.
- [4] J. R. Haynes and W. Shockley, “Investigation of Hole Injection in Transistor Action,” *Physical Review*, vol. 75, no. 4, pp. 691–691, Feb. 15, 1949. DOI: 10.1103/PhysRev.75.691.

Appendices

A Some Test Data

B Derivation of Square Law

Acknowledgement