

**QUAD POLARIZATION WIDEBAND
SINUOUS ANTENNA ELEMENTS AND
ARRAYS**

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**QUAD POLARIZATION WIDEBAND
SINUOUS ANTENNA ELEMENTS AND
ARRAYS**

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DECLARATION

I hereby declare that the thesis is my original work and it has been written by me in its entirety.

I have duly acknowledged all the sources of information which have been used in the thesis.

This thesis has also not been submitted for any degree in any university previously.

Ramanan Balakrishnan

14th August 2014

$$\nabla \cdot \mathbf{E} = \frac{\rho}{\epsilon_0}$$

$$\nabla \cdot \mathbf{B} = 0$$

$$\nabla \times \mathbf{E} = -\frac{\partial \mathbf{B}}{\partial t}$$

$$\nabla \times \mathbf{B} = \mu_0 \mathbf{J} + \mu_0 \epsilon_0 \frac{\partial \mathbf{E}}{\partial t}$$

and there was light

Acknowledgment

Let's thank some people here.

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Abstract

A section to summarize the main contributions of this thesis.

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List of Symbols

λ	wavelength
ϵ_r	relative dielectric constant
k	wave number, defined as $2\pi/\lambda$

List of Abbreviations

IEEE	Institute of Electrical and Electronics Engineers
PASS	Phased Array System Simulator
RF	Radio Frequency

Chapter 1

The basics

1.1 A simple section

1.1.1 A sub-section

Chapter 2

Figures, sub-figures and more

Chapter 3

Let's talk tables

Chapter 4

Equations and code

