



School of Electronic Engineering

CB54: Machine Learning Algorithms for EM Wave  
Scattering Problems

Conference Paper

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August 2023

MEng in Electronic and Computer Engineering

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# Declaration

I hereby declare that, except where otherwise indicated, this document is entirely my own work and has not been submitted in whole or in part to any other university.

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Date: 2023/08/20

# Machine Learning Algorithms for EM Wave Scattering Problems

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**Abstract** – This is the abstract.

**Index Terms** – index term 1

## I. INTRODUCTION

### A. Task Motivation

The task motivation.

### B. Problem Specification

The problem specification. [1]

## II. REVIEW & ANALYSIS OF PRIOR WORK

### A. Existing approaches and their related use with ML

### B. Combined/Hybrid Methods

### C. Culs-De-Sac

## III. RELATION OF PRIOR WORK TO PROJECT PROBLEM

## IV. CONCLUSION

This is the conclusion.

## REFERENCES

- [1] C. Brennan and K. McGuinness, 'Site-specific Deep Learning Path Loss Models based on the Method of Moments'. arXiv, Feb. 02, 2023. doi: 10.48550/arXiv.2302.01052.

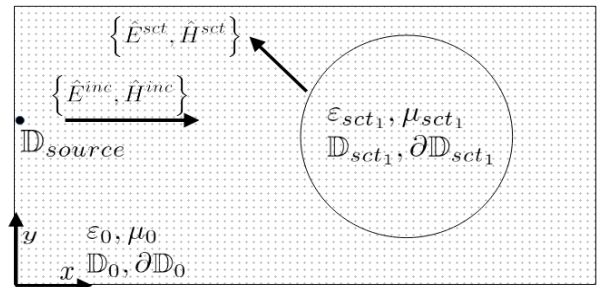


Fig. 1 Problem Illustration. A single source emitting incident waves is located at a fixed x-axis location on the left-hand side of the scatter. Material values are complex valued, frequency-dependent permittivity ( $\epsilon$ ) and permeability ( $\mu$ ). Background points indicate discretization.