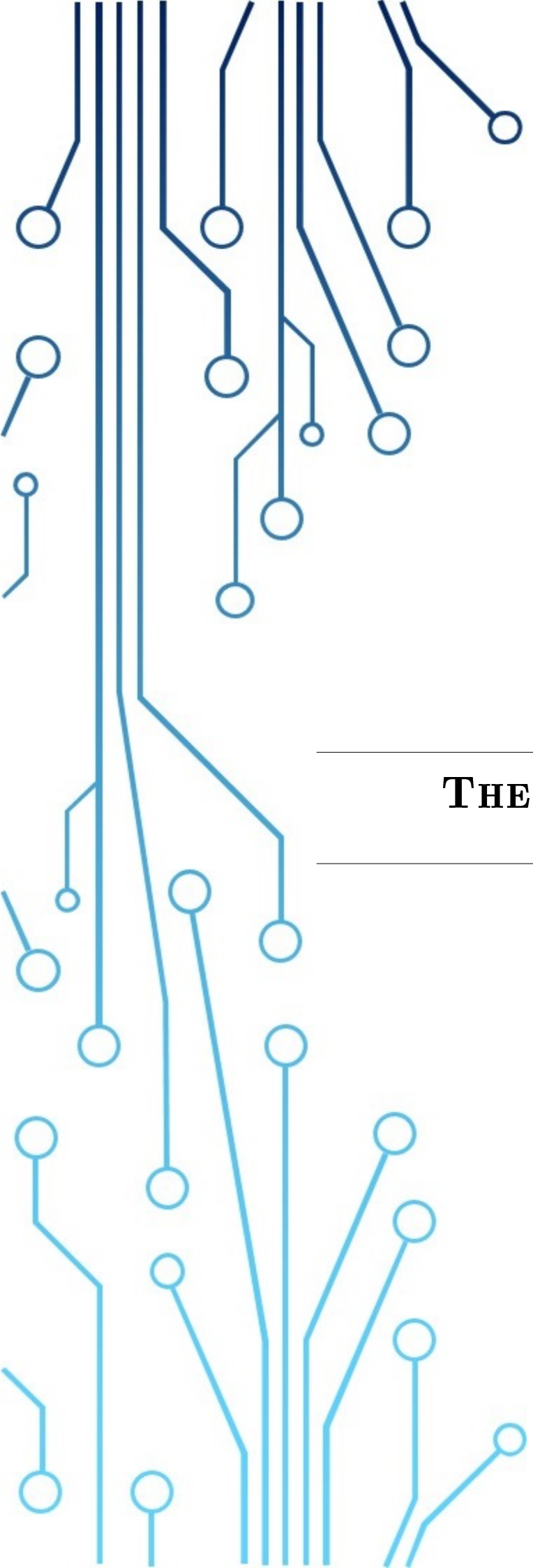

Space Engineering 3
Assignment 1
24th March 2016

Thesis Proposal

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STUDENT PLAGIARISM: COURSE WORK - POLICY AND PROCEDURE COMPLIANCE STATEMENT

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I/We certify that:

(1) I/We have read and understood the *University of Sydney Student Plagiarism: Coursework Policy and Procedure*;

(2) I/We understand that failure to comply with the *Student Plagiarism: Coursework Policy and Procedure* can lead to the University commencing proceedings against me/us for potential student misconduct under Chapter 8 of the *University of Sydney By-Law 1999* (as amended);

(3) this Work is substantially my/our own, and to the extent that any part of this Work is not my/our own I/we have indicated that it is not my/our own by Acknowledging the Source of that part or those parts of the Work.

Name(s): Lydia Drabsch

Signature(s):
Lydia Drabsch

Date: 24/3/16

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2. Lit Review

2.1 What

What are you trying to achieve?
- active shielding of the satellite from
  - solar rad (deep space mission)
  - galatic rad (deep space mission)
  - van allen belts for Earth missions - solar events

2.2 Why

Why is it important?
- currently all satellite constructions that will be exposed to the raidation must be radiation hardened costing ?? or only have a short mission lifetime and the entire satellite is considered disposable.
- passive shielding requires extra mass

2.3 Difficult

What is this difficult to acomplish?
- need to build for the space environment
- must be reliable as once it is launched it cannot be fixed
- still needs to allow EM to pass for communication and for solar power (especially Earth orbit missions)

2.4 What have others done?

2.5 What will you do?

3. Resource Plan

4. Risk Management