## My doctoral thesis title 2

A subtitle

## My doctoral thesis title 2

A subtitle

### Dissertation

for the purpose of obtaining the degree of doctor at Delft University of Technology, by the authority of the Rector Magnificus, prof. dr. ir. T.H.J.J. van der Hagen, chair of the Board for Doctorates, to be defended publicly on @dayname, @day @Month @year at @time o'clock

by

Edgar Allan POE

@highest\_degree, @university\_name, @university\_location born in @location, @country

This dissertation has been approved by the promotor.

Composition of the doctoral committee:

Rector Magnificus chairman

Prof. dr. J. J. Doe Delft University of Technology, promotor

Independent members:

Prof. dr. ir. C. P. A. Wapenaar Delft University of Technology

Prof. dr. P. J. Espy Norwegian University of Science and Technology

dr. A. J. Charlton-Perez University of Reading, United Kingdom

...





Keywords: infrasound ...

 $Cover\ illustration: \dots$ 

ISBN 000-00-0000-000-0: request your free isbn at the library https://www.tudelft.nl/en/library/current-topics/libraryfor-researchers/library-for-researchers/publishing-outreach/research-identity/request-an-isbn-or-issn/

Copyright © 2018 by E. A. Poe.

All rights reserved. No part of the material protected by this copyright may be reproduced, or utilised in any other form or by any means, electronic or mechanical, including photocopying, recording or by any other information storage and retrieval system, without the prior permission of the author.

Type setting system:  $\mbox{\sc IMT}_{\mbox{\sc E}}\mbox{\sc X}.$ 

Printed in @publisher\_country by @publisher\_name, @publisher\_location.

An electronic version of this dissertation is available at http://repository.tudelft.nl/.



 $For\ you$ 

### **Preface**

"We live at a very special time ... the only time when we can observationally verify that we live at a very special time"

Lawrence M. Krauss

This is the LATEX layout used for my PhD thesis [Smets, 2018]. If you have any further question related to the LATEX thesis style: contact me at p.s.m.smets@tudelft.nl.

Pieter Smets, Delft, 28 March 2018 ii Preface

## **Summary**

### My doctoral thesis title - a subtitle

There are 5 total chapters. There are 4 main matter chapters. There are 1 appendix chapters. Summary

# Samenvatting

Titel in NL

...

Samenvatting Samenvatting

## **Contents**

Pr	eface		i
Su	ımma	ry	iii
Sa	menv	vatting	v
1	Intro	oduction	1
	1.1	Section	1
		1.1.1 Subsection	1
	1.2	Some blindtext	1
		1.2.1 Itemize	2
		1.2.2 Enumerate	2
		1.2.3 Description	2
	1.3	Figure and caption	2
	1.4	A rounded box that floats!	4
	1.5	Blank footnote and publicationNote	4
	1.6	Abstracts	4
		1.6.1 chapterabstract	4
		1.6.2 sectionabstract	5
2	Title	e of your first chapter	7
	2.1	Introduction	8
		2.1.1 Some blindtext	8
3	Ano	ther chapter	9
	3.1	A 3d tikz figure	10
	3.2	A full page figure with a split caption	11
4	Con	clusions and recommendations	15

viii	Contents

		Conclusions	_
Α		itional theory  Some more equations	<b>17</b> 17
Bil	bliogr	raphy	19
Lis	t of	symbols and abbreviations	21
Cu	rricu	lum Vitæ	23

### Introduction

"Stratospheric sudden warmings are the clearest and strongest manifestation of dynamical coupling in the stratosphere-troposphere system."

Charlton and Polvani, 2007

We start the first chapter of this thesis with an **\epigraph**. And I prefer to start the first paragraph of each chapter with **\noindent** as within a (sub)section.

### 1.1 Section

Up to three levels with numbering (chapter, section, subsection) and a fourth unnumbered level (subsubsection).

#### ■ 1.1.1 Subsection

#### Subsubsection

#### 1.2 Some blindtext

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be

Note that minor changes have been introduced to make the text consistent with the other chapters.

Published as: Poe, E. A., ... .

2 Introduction

written in of the original language. There is no need for special content, but the length of words should match the language.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

#### ■ 1.2.1 Itemize

- First item in a list
- Second item in a list
- Third item in a list

#### ■ 1.2.2 Enumerate

- [1] First item in a list
- [2] Second item in a list
- [3] Third item in a list

#### ■ 1.2.3 Description

First item in a list

**Second** item in a list

Third item in a list

### 1.3 Figure and caption

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some

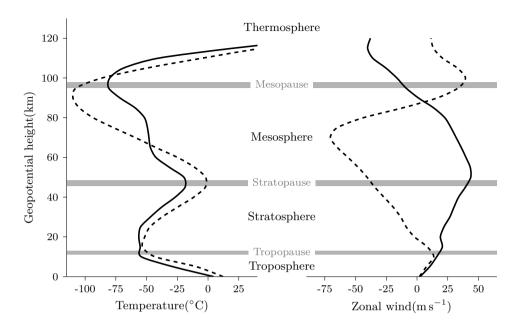


Figure 1.1: This is how a caption looks like.

nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

4 Introduction

### 1.4 A rounded box that floats!

A floating rounded box can be used to provide additional information without the need for manually interrupting your main content. Within the box you can literally do what you want and floating behaves like a figure.

### 1.5 Blank footnote and publicationNote

Since this chapter is published elsewhere, a blank footnote with the publication details is added on the first page using **\blfootnote** and a **\publicationNote** directly after the chapter title.

The text of the \publicationNote can be altered in the main IATEX file thesis.tex

#### 1.6 Abstracts

### ■ 1.6.1 chapterabstract

If published a chapter you can add the abstract to the beginning using the chapterabstract environment. A pagebreak is added afterwards to start the first section on a new page.

Roundedbox with a description can be used to highlight or further explain anything. The content is placed within a grey floating! box with rounded corners. No need to manually interrupt your main content!

- **Major** A latitudinal mean temperature increase poleward of  $60^{\circ}$  latitude with an associated easterly circulation around  $10\,\mathrm{hPa}$  accompanied with either a vortex displacement or vortex split. Major warmings occur mostly in January–February.
- Minor Zonal winds in the stratosphere weaken, reversing the temperature gradient between the poles and midlatitudes, but do not lead to a breakdown nor reversing of the polar vortex.
- Canadian An early winter warming with strong non-zonal character solely occurring in the Northern Hemisphere. The net zonal winds briefly change but are not strong enough to cause a breakdown of the polar vortex.
- **Final** A major warming which appears at the end of the winter indicating the transition from a cold winter system to a warm high-pressure system due to the change from polar night to polar day.

1.6 Abstracts 5

#### ■ 1.6.2 sectionabstract

Similarly you can an abstract to a section, for example, if you present two letters in a single chapter. Place each letter in a section followed by the \blfootnote and the \publicationNote and then add a \begin{sectionabstract} and \end{sectionabstract}. In this case, no pagebreak is added afterwards.

6 Introduction

## Title of your first chapter

**Abstract** If published this chapter you can add the abstract here using \begin{chapterabstract} and \end{chapterabstract}. A pagebreak is added to start the first section on a new page.

Published as: Poe, E. A., ... .

#### 2.1 Introduction

**Abstract** If you want to add a summary to a section, for example, if you merge two published letters into a chapter, you can add the abstract using \begin{sectionabstract} and \end{sectionabstract}. In this case, no pagebreak will be added afterwards.

#### ■ 2.1.1 Some blindtext

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

## **Another chapter**

**Abstract** Again the chapter abstract

10 Another chapter

### 3.1 A 3d tikz figure

Infrasound is recorded using surface based arrays of microbarometers consisting of three or more instruments. In this example, a 3d tikz figure is shown existing of a configuration file with parameters and three tikz views.

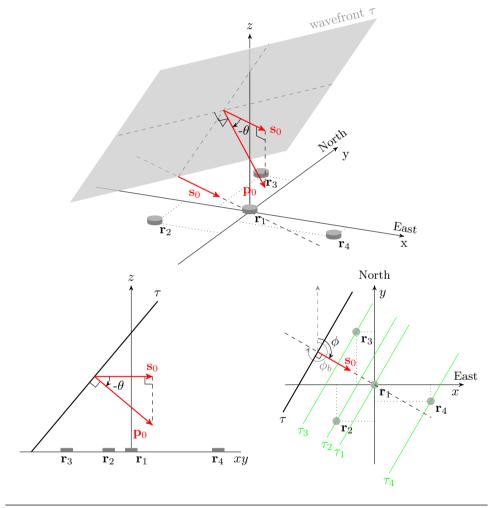


Figure 3.1: An inclined three-dimensional planar wavefront  $\tau$  traveling over an array of four microbarometers located in the xy-plane, i.e., the earth's surface. ...

### 3.2 A full page figure with a split caption

Infrasound is recorded using surface based arrays of microbarometers consisting of three or more instruments. In this example, a 3d tikz figure is shown existing of a configuration file with parameters and three tikz views.

12

Another chapter

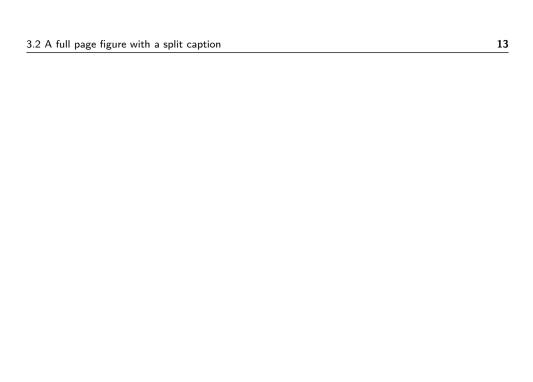


Figure 3.2 (preceding page): A caption does not fit on the previous page, so put in on the following page. Float handling and the preceding page notification is solved for you.

14 Another chapter

## **Conclusions and recommendations**

In this final chapter  $\dots$ 

4.1 Conclusions

....

4.2 Recommendations and outlook

....



## **Additional theory**

### A.1 Some more equations

Signal summation for an array of N receivers ideally leads to an increased signal-to-noise-ratio by  $\sqrt{N},$ 

$$\frac{\mathrm{SNR}_N}{\mathrm{SNR}_n} = \sqrt{N}.$$

18 Additional theory

## **Bibliography**

Smets, P. S. M. (2018), Infrasound and the Dynamical Stratosphere: A new application for operational weather and climate prediction, Dissertation, Delft University of Technology, doi: 10.4233/UUID:517F8597-9C24-4D01-83ED-0F430353E905.

20 Bibliography

## List of symbols and abbreviations

### **Symbols**

The principal symbols used are alphabetically listed. Symbols formed by adding overbars, primes or indices are not listed separately. Boldface type indicates vector quantities.

$\mathbf{Symbol}$	Description	${f Units}$
$\alpha$	Atmospheric attenuation	$\mathrm{m}^{-2}$
d	Distance	m
${\mathcal Z}$	Acoustic impedance ratio	-
Z	Acoustic impedance	${\rm kg}{\rm m}^{-2}{\rm s}^{-1}$
$Z_g$	Geopotential height	m

### **Abbreviations**

2DFD Two-dimensional wave spectra

4D-Var Four-dimensional variational data assimilation

CTBT Comprehensive Nuclear-Test-Ban Treaty

CTBTO Comprehensive Nuclear-Test-Ban Treaty Organization ECMWF European Centre for Medium-Range Weather Forecasts

GMT Generic Mapping Tools

KNMI Royal Netherlands Meteorological Institute

UTC Universal Time Coordinated

### **Curriculum Vitæ**

### **Edgar Allan Poe**

19-01-1809 Boston, USA.

### **Education**

1815–1816 Grammar school

School, Location.

2006-2009 B.Sc. ...

University, Location.

2009-2010 M.Sc. ...

University, Location.

Thesis: Thesis title Promotor: Prof. J. Doe

24 Curriculum Vitæ

### List of publications

### ■ Peer-reviewed publications of this thesis

[2] Poe, E. A., and co-authors (2018), My introduction published as a book chapter, Chap. 23 in: names of the editors (eds) Title of the book, Springer, Dordrecht.

Chapter 1 of this thesis

[1] **Poe**, **E. A.**, and co-authors (2017), My first article title, Journal name, Volume, startpage—endpage. Section 2 of this thesis

Note that minor changes have been introduced to make the text consistent with the other chapters.

#### ■ Full publication record

An up-to-date record of peer-reviewed publications and selected conference presentations is available at https://www.pietersmets.be.