

UNIVERSITÀ
DEGLI STUDI DI TRIESTE

LINGUA INGLESE PARI A LIVELLO B2

Dipartimento di Ingegneria e Architettura

Prof. Lourdes Elizabeth Gonzalez-Valera, Ph.D.

Lesson 7-8
Academic Papers
Thesis and Dissertation

Analysis of Examples

Academic Papers

Papers, theses and dissertations: common and different features

Parts of a paper

Academic papers in Trieste

Other texts

- Letters
- Blogs
- Essays
- Reports
- Presentations
- Instructions
- Leaflets and flyers
- **Papers**
- **Theses**
- **Dissertations**

- **Paper** (Congress, symposium, course work)
- **Thesis** (Bachelor or Masters degree)
- **Dissertation** (Ph.D.)

Differ

- in length
- in depth

Similar:

- in style (formal)

Similar:

- in style (formal)

They do not:

- include informal or slang words
- include contractions, such as **isn't** and **won't**
- generally include phrases that use the words **I, me, or my**

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-

Paper

In academic publishing, a paper is an academic work that is usually published in an academic journal. It contains original research results or reviews existing results.

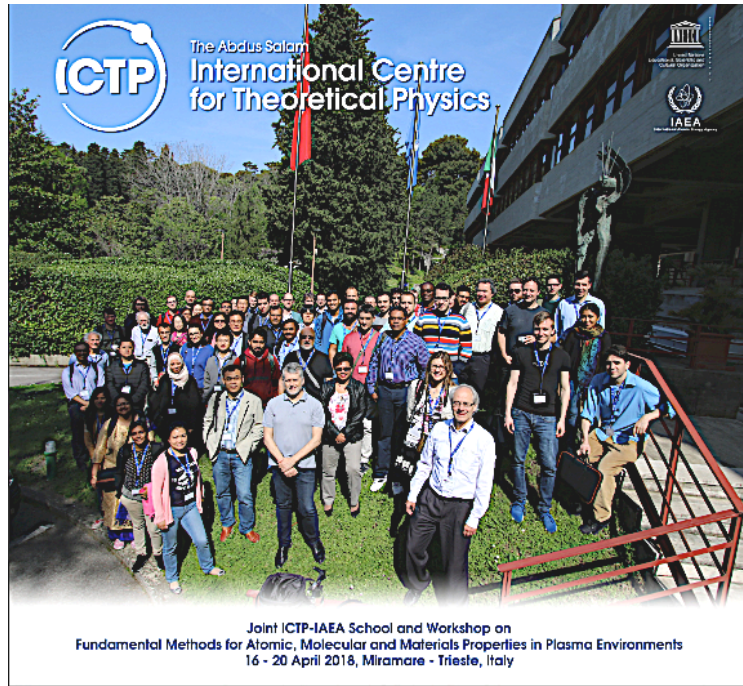
Such a paper, also called an article, will only be considered valid if it undergoes a process of peer review by one or more *referees* (who are academics in the same field) who check that the content of the paper is suitable for publication in the journal. A paper may undergo a series of reviews, revisions, and re-submissions before finally being accepted or rejected for publication.

Key point to remember

Before you even start to plan your paper or academic article make sure you have a copy of the **journal' rules** on how to structure it.

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ICTP: International Centre for Theoretical Physics



ICTP

wireless.ictp.it

Wireless Laboratory:

Provide reliable and sustainable wireless solutions to help foster science and research in Developing Countries.

Organise training activities on state-of-the-art wireless technologies.

Setup collaborations with academic partners and with international organizations.

Reading a paper

Reference:

J. Herrera-Tapia, E. Hernandez-Orallo, A. Tomas, C. Tavares Calafate, J.C. Cano, M. Zennaro and P. Manzoni. **Evaluating the use of sub-gigahertz wireless technologies to improve message delivery in opportunistic networks**, in proceedings of 14th IEEE International Conference on Networking, Sensing and Control, May 16-18, 2017, Calabria, Italy

What's in an abstract?

An **abstract** is a brief summary of a **research article, thesis, review, conference proceeding**, or any **in-depth analysis** of a particular subject and is often used to help the reader quickly ascertain the paper's purpose. When used, an abstract always appears at the beginning of a manuscript or typescript, acting as the point-of-entry for any given academic paper or patent application.

(How to write a good abstract):

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3136027/>

Table 1

General qualities of a good abstract

The abstract is a condensed and concentrated version of the full text of the research manuscript. It should be sufficiently representative of the paper if read as a standalone document.

The abstract must be as detailed as possible within the word count limits specified by the journal to which the paper is intended to be submitted. This will require good precis writing skills, as well as a fine judgment about what information is necessary and what is not.

The abstract must contain as much information as possible on the analyses related to the primary and secondary outcome measures.

The abstract should not present a biased picture, such as only favorable outcomes with the study drug, or findings that support the authors' hypotheses; important nonsignificant and adverse findings should also receive mention. Thus, to the extent possible, the reader should be able to independently evaluate the authors' conclusions.

Pictorial example
of abstract:

This represents
your article, paper,
thesis or
dissertation:



A



B



C



D



Which one should be your abstract?

Pictorial example
of abstract:

This is your article,
paper, thesis
or dissertation:



A



B



C



D



This is your abstract

Structure of a Good Abstract

In science, the abstract should include a few sentences from each of the following sections:

- *Introduction*: the goal of the study, crucial background
- *Methods*: basic study design
- *Results*: summary of major findings
- *Discussion*: Interpretations, conclusions, broader implications, future research

Importantly, this same format can apply to abstracts written in disciplines outside the sciences:

- Introduction = the state of the field and/or the gap your research is filling
- Method = Describing what you did to develop your argument
- Results = A statement of the thesis
- Discussion = The larger implications of your findings

<https://www.brandeis.edu/writing-program/resources/faculty/handouts/features-good-abstract.html>

Abstract—The message delivery ratio of mobile opportunistic networks strongly depends on the transmission time, which is closely related either to the mobility of users and to the communication properties of the mobile devices. A larger radio transmission range allows longer contact durations, improving the message dissemination. Furthermore, user mobility is a crucial factor to be considered, especially when the mobile nodes are vehicles, because of their limited freedom of movement and the high relative speed.

background

In this paper, we evaluate the use of a sub-gigahertz wireless technology, namely LoRa (Long Range), to establish links between the mobile users in an opportunistic network in order to augment the number of contacts and their duration. We evaluate the performance of LoRa, comparing it with WiFi, using the Epidemic protocol for message diffusion with realistic vehicular traces. Through simulations, we compare the message delivery probability and the network overhead. These experiments were carried out using the ONE simulator with minor modifications to model the typical behaviour of mobile users. The results show that, in opportunistic networks, increasing the range even while reducing the available bandwidth increases the message delivery ratio.

methods

results/
conclusion

Abstract

In the last decades, the demand for higher comfort levels on board of ships has increased year by year. Comfort has always been a key factor in cruise ships and pleasure yachts, though recently, the attention to the condition of seafarers has also increased. Several studies in the last years focused on how to improve comfort on board, suggesting methods and analytical instruments for the prediction of vibration and noise levels during the ship design process. Other studies investigated how to reduce the vibration transmitted from the machinery to the ship or how to reduce the vibration of radiating surfaces with the aim of reducing the noise levels on board.

Some early studies, addressed pillars as a key factor in vibration transmission, this viewpoint was shared also by shipbuilding companies. Aim of this work is to study a device for the reduction of vibration transmission through the pillars. This research is a first step in the development of such device. The main element of the isolator is a resilient element. In order to guarantee the structural capability of the device, the design loads acting on the pillars have been evaluated on a reference yacht and on a cruise ship using both scantling rules and direct FE calculation. Prototypes with different designs have been built and their dynamic characteristics have been studied in a laboratory experimental facility basing on the ISO 10846 standard for the laboratory measurement of the vibro-acoustic properties of isolators. The prototype design showing the lowest transmissibility has been tested on a real scale mock-up representing a portion of two decks with the typical structure of a cruise ship. The real scale test shows the effectiveness of the isolator in the reduction of the vibration transmitted through the pillar.

In addition, a simplified finite element model of the isolator has been set up using the data measured on the mock-up structure and the simplified model has been used to study the isolator effectiveness on a superyacht finite element model. The comparative numerical study and most of all the experimental tests led to very positive results which could pave the way to promising developments in the future.

Abstract
example



Prospects for a safe COVID-19 vaccine

Barton F. Haynes^{1,*}, Lawrence Corey², Prabhavathi Fernandes³, Peter B. Gilbert⁴, Peter J. Hotez⁵, Srinivas R...

+ See all authors and affiliations

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DOI: 10.1126/scitranslmed.abe0948

Article

Figures & Data

Info & Metrics

eLetters

PDF

Abstract

Rapid development of an efficacious vaccine against the viral pathogen severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), the cause of the coronavirus disease 2019 (COVID-19) pandemic, is essential, but rigorous studies are required to determine the safety of candidate vaccines. Here, on behalf of the Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV) Working Group, we evaluate research on the potential risk of immune enhancement of disease by vaccines and viral infections, including coronavirus infections, together with emerging data about COVID-19 disease. Vaccine-associated enhanced disease has been rarely encountered with existing vaccines or viral infections. Although animal models of SARS-CoV-2 infection may elucidate mechanisms of immune protection, we need observations of enhanced disease in people receiving candidate COVID-19 vaccines to understand the risk of immune enhancement of disease. Neither principles of immunity nor preclinical studies provide a basis for prioritizing among the COVID-19 vaccine candidates with respect to safety at this time. Rigorous clinical trial design and postlicensure surveillance should provide a reliable strategy to identify adverse events, including the potential for enhanced severity of COVID-19 disease, after vaccination.

Citation guidelines in:

<https://iee-dataport.org/sites/default/files/analysis/27/IEEE%20Citation%20Guidelines.pdf>

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Theses and Dissertations



Definition

A **thesis or dissertation** is a document submitted in support of candidature for an academic degree or professional qualification presenting the author's **research and findings**.

In some contexts, the word "thesis" or a cognate is used for part of a bachelor's or master's course, while "dissertation" is normally applied to a doctorate, while in other contexts, the reverse is true.

The term **graduate thesis** is sometimes used to refer to both master's theses and doctoral dissertations.

Etymology

The term "thesis" comes from the Greek **θέσις**, meaning "something put forth", and refers to an **intellectual proposition**.

"Dissertation" comes from the Latin **dissertātiō**, meaning "**discussion**".



THE GRADUATE THESIS

Getting Started

Planning Your Graduate Degree

The Supervisory Committee

Roles and Responsibilities

The Working Relationship

The Graduate Thesis

The Thesis Proposal

Before you Start to Write

Defending the Thesis

Your thesis will be the final product of your time in graduate school. You should be planning your thesis from the very beginning of your degree program.

A thesis is a substantial piece of scholarly writing that reflects the writer's ability to:

- conduct research
- communicate the research
- critically analyze the literature
- present a detailed methodology and accurate results
- verify knowledge claims and sources meticulously
- link the topic of the thesis with the broader field

A thesis at the doctoral level is called a dissertation, but dissertations and theses are usually referred to collectively as theses.

There are some differences between a master's and a doctoral thesis:

- A master's thesis must demonstrate that the student knows the background and principal works of the research area, and can produce significant scholarly work. It should contain some original contribution whenever possible.

<https://www.grad.ubc.ca/handbook-graduate-supervision/graduate-thesis>

DOWNLOAD > Student/Supervisor Expectations

Getting Started ▾

Planning Your Graduate Degree ▾

The Supervisory Committee ▾

Roles and Responsibilities ▾

The Working Relationship ▾

The Graduate Thesis ▲

The Thesis Proposal >

Before you Start to Write ▾

Defending the Thesis ▾

Research Ethics: A Guide for
Graduate Students ▾

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- A doctoral thesis must contain a substantial contribution of new knowledge to the field of study. It presents the results and an analysis of original research, and should be significant enough to be published.

The UBC Library keeps electronic copies of all theses written by UBC graduate students in its institutional repository, [cIRcle](#). Take a look for examples of theses in your area of interest. Please refer to [Dissertation and Thesis Preparation](#) on this web site for formatting details.

<https://www.grad.ubc.ca/handbook-graduate-supervision/graduate-thesis>

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<https://www.grad.ubc.ca/handbook-graduate-supervision/graduate-thesis>



In Italy

In Italy there are normally three types of thesis. In order of complexity:

- One for the **Laurea** (equivalent to the UK Bachelor's Degree),
- another one for the **Laurea Magistrale** (equivalent to the UK Master's Degree),
- and then a thesis to complete the **Dottorato di Ricerca** (PhD).

Thesis requirements vary greatly between degrees and disciplines, ranging from as low as 3 – 4 ECTS (European Credit Transfer System) credits to more than 30.

Thesis work is **mandatory** for the completion of a degree.

M.Sc.

Master of Science < lat. Magister Scientiæ

Laurea Magistrale

M.A. Master of Arts.

Ph.D.

Philosophiae Doctor. Dottorato di Ricerca

A. B. D. (All But Dissertation)

Time is **not** of the essence!

Theses and dissertations are complicated pieces of work and are not easy to write. You can help yourself with this challenging task by **planning** ← the structure of your work very **thoroughly**. → You will want to show the plan to your supervisor before you start to write it. Your discussions with your supervisor will very often result in changes to your plan so **allow** ← yourself plenty of time for the **planning stage** of the process.

Planning

- | | |
|-----------------------------|------------|
| 1. Who is this writing for? | AUDIENCE |
| 2. What do I want to say | CONTENT |
| 3. Why do I want to say it? | MOTIVATION |

Based on: [HarperCollins. Writing \(Collins Webster's Easy Learning\) . HarperCollins Publishers. 2011. Kindle Edition.](#)

Planning

1. Why do I want to say it? **MOTIVATION**
2. Who is this writing for? **AUDIENCE**
3. What do I want to say **CONTENT**

Based on: HarperCollins. Writing (Collins Webster's Easy Learning) .
HarperCollins Publishers. 2011. Kindle Edition.

Graduate Thesis or Dissertations

Dissertations normally report on a research project or study, or an extended analysis of a topic.

The structure of a thesis or dissertation explains the purpose, the previous research literature impinging on the topic of the study, the methods used, and the findings of the project.

Structure (1)

Most world universities use a **multiple chapter** format :

- a) **an introduction**, which introduces the research topic, the methodology, as well as its scope and significance;
- b) **a literature review**, reviewing relevant literature and showing how this has informed the research issue;
- c) **a methodology** chapter, explaining how the research has been designed and why the research methods/ population/data collection and analysis being used have been chosen.

Thomas, Gary (2009) Your Research Project. Thousand Oaks: Sage.

Structure (2)

- d) **a findings chapter**, outlining the findings of the research itself;
- e) **an analysis and discussion** chapter, analysing the findings and discussing them in the context of the literature review (this chapter is often divided into two—analysis and discussion);
- f) **a conclusion**

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Thomas, Gary (2009) Your Research Project. Thousand Oaks: Sage.

1

Discussion of Theses examples from the University of Trieste

See pdfs in Moodle

2

Discussion of multiple-choice questions related to the English B2 syllabus.