



BACHELOR THESIS

Applications of Persistent Homology (Placeholder)

Dominique F. Garmier

dgarmier@student.ethz.ch

April 13, 2024

Supervisor: DR. SARA KALISNIK HINTZ
Department of Mathematics, ETH ZÜRICH

Abstract

Hello World

Contents

1	Introduction	2
2	Categories	3
2.1	Clustering Schemes	3
A		4
B	Layout	5

Chapter 1

Introduction

Hello World

Test Citation [1]

Chapter 2

Categories

Definition 2.1: Category

Definition 2.2: Functor

2.1 Clustering Schemes

Definition 2.3: Finite Metric Spaces

$$\mathcal{M}_{\text{iso}} \subset \mathcal{M}_{\text{inj}} \subset \mathcal{M}_{\text{gen}}$$

Definition 2.4: Standard Clustering

$$\mathcal{C}$$

Definition 2.5: Hierarchical Clustering

$$\mathcal{H}$$

Definition 2.6: Clustering Schemes as a Functors

$$\mathcal{M}_{\text{inj}} \xrightarrow{\mathcal{C}} \mathcal{H}$$

Appendix A

Hello World

Appendix B

Layout

Theorem B.1: Foo Bar Thm

theorem [B.1](#)

Proof. foo bar baz

□

Corollary B.2

corollary

Proof. foo bar baz

□

Proposition B.3

proposition

Proof. foo bar baz

□

Lemma B.4

lemma

Proof. foo bar baz

□

Fact B.5

foo bar baz

Notation B.6

foo bar baz

Definition B.7

foo bar baz

Example B.8

foo bar baz

Remark B.9

foo bar baz

Bibliography

- [1] Gunnar Carlsson and Facundo Memoli. Classifying clustering schemes, 2010.