## Scuola di Scienze Dipartimento di Fisica e Astronomia Corso di Laurea in Fisica

## GEOMETRIC DEEP LEARNING

Relatore: Presentata da: Prof.ssa. Rita Fioresi Tommaso Lamma

Anno Accademico 2020/2021

## Contents

1	Introduction		1
	1.1	Abstract simplicial complexes	1
	1.2	Differential forms on abstract simplicial complexes	1
	1.3	Integration on simplicial chains	1
	1.4	Smooth real manifolds and abstract graphs	1

## 1 Introduction

- 1.1 Abstract simplicial complexes
- 1.2 Differential forms on abstract simplicial complexes
- 1.3 Integration on simplicial chains
- 1.4 Smooth real manifolds and abstract graphs