

University of California
Santa Barbara

Higgs Things well

A dissertation submitted in partial satisfaction
of the requirements for the degree

Bachelor of Science
in
Physics

by

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June 2020

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May 2020

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Acknowledgements

The research presented in this senior thesis would not been possible if not for the many people's guidance, encouragement, and help. Foremost, I would like to thank my research adviser Dr. Claudio Campagnari for his constant support and mentorship, both in research and my student life in the past almost 3 years. He lead me into the field of High Energy physics and had provided personal attention to my progress along the way. He is also the one who suggested the research topic to me as a step up from what I have been doing.

At the same time, I would also like to thank Dr. Ulascan Sarica, who is the primary correspondent in physics analysis for this research at UCSB. It would not be possible for me to undertake such a complex analysis if not for his dedication and careful teaching.

Additionally, I would like to acknowledge the help from Nick Amin, who guided me personally in the summer of 2017 when I first joined the group. Nick has also helped me tremendously in both physics and technical issues and have provided many useful tools for physics and computing. In the same regard, I would like to thank Bennett Marsh and Sicheng Wang for their help and guidance in the past years.

Curriculum Vitæ

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20XX	Ph.D. in Physics (Expected), University of California, Santa Barbara.
20XX	M.A. in Physics, University of California, Santa Barbara.
20XX	etc

Publications

Publications.

Abstract

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Abstract text.

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Chapter 1

Introduction

Cum Veteres Mechanicam (uti Author est Pappus) in verum Naturalium investigatione maximi fecerint, & recentiores, missis formis substantialibus & qualitatibus occultis, Phenomena Naturae ad leges Mathematicas revocare aggressi sint: Visum est in hoc Tractatu Mathesin excolere quatenus ea ad Philosophiam spectat. Mechanicam vero duplicem Veteres constituerunt: Rationalem quae per Demonstrationes accurate procedit, & Practicam. Ad practicam spectant Artes omnes Manuales, a quibus utique Mechanica nomen mutuata est. Cum autem Artifices parum accurate operari soleant, fit ut Mechanica omnis a Geometria ita distinguatur, ut quicquid accuratum sit ad Geometriam referatur, quicquid minus accuratum ad Mechanicam. Attamen errores non sunt Artis sed Artificum. Qui minus accurate operatur, imperfectior est Mechanicus, & si quis accuratissime operari posset, hic foret Mechanicus omnium perfectissimus. Nam & Linearum rectarum & Circulorum descriptiones in quibus Geometria fundatur, ad Mechanicam pertinent. Has lineas describere Geometria non docet sed postulat. Postulat enim ut Tyro easdem accurate describere prius didicerit quam limen attingat Geometri; dein, quomodo per has operationes Problemata solvantur, docet. Rectas & circulos describere Problemata sunt sed non Geometrica. Ex Mechanica postulatur horum solutio, in Geometria docetur

solutorum usus. Ac gloriatur Geometria quod tam paucis principiis aliunde petitis tam multa prstet. Fundatur igitur Geometria in praxi Mechanica, & nihil aliud est quam Mechanic universalis pars illa quae artem mensurandi accurate proponit ac demonstrat. Cum autem artes Manuales in corporibus movendis precipue versentur, fit ut Geometria ad magnitudinem, Mechanica ad motum vulgo reseratur. Quo sensu Mechanica rationalis erit Scientia Motuum qui ex viribus quibuscunq; resultant, & virium quae ad motus quoscunq; requiruntur, accurate proposita ac demonstrata. Pars haec Mechanic a Veteribus in Potentiis quinque ad artes manuales spectantibus exculta fuit, qui Gravitatem (cum potentia manualis non sit) vix aliter quam in ponderibus per potentias illas movendis considerarunt. Nos autem non Artibus sed Philosophi consulentes, deq; potentiis non manualibus sed naturalibus scribes, ea maxime tractamus quae ad Gravitatem, levitatem, vim Elasticam, resistantiam Fluidorum & ejusmodi vires seu attractivas seu impulsivas spectant: Et ea propter haec nostra tanquam Philosophi principia Mathematica proponimus. Omnis enim Philosophi difficultas in eo versari videtur, ut a Phnomenis motuum investigemus vires Naturae, deinde ab his viribus demonstremus phnomena reliqua. Et hac spectant Propositiones generales quas Libro primo & secundo pertractavimus. In Libro autem tertio exemplum hujus rei proposuimus per explicationem Systematis mundani. Ibi enim, ex phnomenis celestibus, per Propositiones in Libris prioribus Mathematicae demonstratas, derivantur vires gravitatis quibus corpora ad Solem & Planetas singulos tendunt. Deinde ex his viribus per Propositiones etiam Mathematicas deducuntur motus Planetarum, Cometarum, Lunae & Maris. Utinam cetera Naturae phnomena ex principiis Mechanicis eodem argumentandi genere derivare liceret. Nam multa me movent ut non-nihil suspicer ea omnia ex viribus quibusdam pendere posse, quibus corporum particulae per causas nondum cognitae vel in se mutuo impelluntur & secundum figuras regulares cohrent, vel ab invicem fugantur & recedunt: quibus viribus ignotis, Philosophi hactenus Naturam frustra tentarunt. Spero autem quod vel huic Philosophandi modo, vel veriori

alicui, Principia hic posita lucem aliquam praebeant.

In his edendis, Vir acutissimus & in omni literarum genere eruditissimus Edmundus Halleus operam navavit, nec solum Typothetarum Sphalmata correxit & Schemata incidi curavit, sed etiam Author fuit ut horum editionem aggredere. Quippe cum demonstratam a me figuram Orbium celestium impetraverat, rogare non destitit ut eadem cum Societate Regali communicarem, Qu deinde hortatibus & benignis suis auspiciis effecit ut de eadem in lucem emittenda cogitare inciperem. At postquam Motuum Lunarium inqualitates aggressus essem, deinde etiam alia tentare coepissem quae ad leges mensuras Gravitatis & aliarum virium, ad figuras a corporibus secundum datas quascunque leges attractis describendas, ad motus corporum plurium inter se, ad motus corporum in Mediis resistentibus, ad vires, densitates & motus Mediorum, ad Orbes Cometarum & similia spectant, editionem in aliud tempus differendam esse putavi, ut cetera rimarer & una in publicum darem. Quae ad motus Lunares spectant, (imperfecta cum sint,) in Corollariis Propositionis LXVI. simul complexus sum, ne singula methodo prolixiore quam pro rei dignitate proponere, & sigillatim demonstrare tenerer, & seriem reliquarum Propositionum interrompere. Nonnulla sero inventa locis minus idoneis inserere malui, quam numerum Propositionum & citationes mutare. Ut omnia candide legantur, & defectus, in materia tam difficili non tam reprehendantur, quam novis Lectorum conatibus investigentur, & benigne suppleantur, enixe rogo.

1.1 Permissions and Attributions

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Chapter 2

Chapter 2 Title

2.1 Section Title

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mauris et neque massa. Fusce sit amet orci libero. Morbi venenatis quam ante, in vehicula diam. Cras in dui sem, et fermentum ligula. Sed sed tellus ut purus semper pharetra euismod nec tellus. Nullam tortor justo, tincidunt sed varius vel, rhoncus id ipsum. Sed ipsum sem, bibendum id posuere sit amet, dignissim vel odio. Integer pretium mattis metus eu porta. Sed luctus, eros eu feugiat euismod, nulla augue fringilla nisi, sed gravida sem orci ac urna.

Chapter 3

Chapter 3 Title

3.1 Section Title

[1, 2]. Figure 3.1.

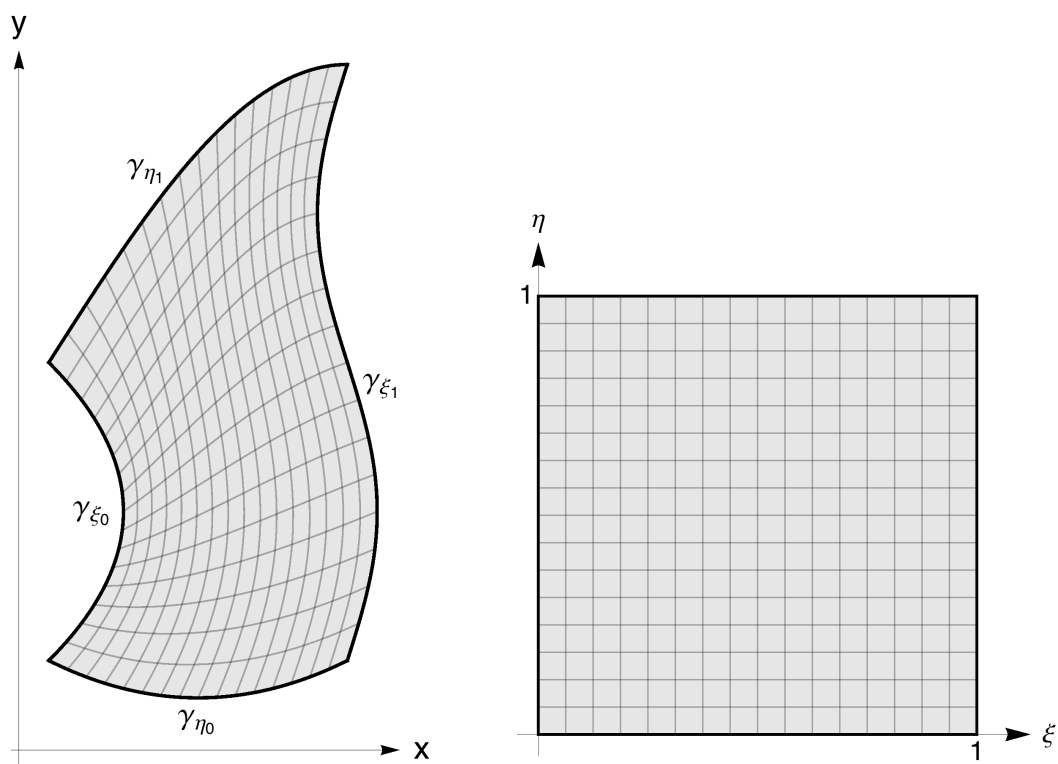


Figure 3.1: Figure Captions.

Appendix A

Appendix Title

A.1 Section Title

Appendicitis

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