



Universidad de Cantabria
Departamento de Física Moderna



CSIC - Universidad de Cantabria
Instituto de Física de Cantabria

Una visión multifrecuencia de Núcleos de Galaxias Activas

Memoria presentada por el Licenciado

Ignacio Ordovás Pascual

para optar al título de Doctor en Ciencia y Tecnología

2018

Declaración de Autoría

Silvia Mateos Ibáñez, Doctora en Ciencias Físicas y Profesora Contratada Doctora de la Universidad de Cantabria,

y

Francisco Jesús Carrera Troyano, Doctor en Ciencias Físicas y Catedrático de la Universidad de Cantabria,

CERTIFICAN que la presente memoria

Una visión multifrecuencia de Núcleos de Galaxias Activas

ha sido realizada por **Ignacio Ordovás Pascual** bajo nuestra dirección.

Consideramos que esta memoria contiene aportaciones suficientes para construir la tesis Doctoral del interesado.

En Santander, a 11 de Julio de 2018

Silvia Mateos Ibáñez

Francisco Jesús Carrera Troyano

A mi familia y amigos...

Agradecimientos

Agradecimientos

Caca

Cacacacacacacca.

Resumen de la tesis en castellano

Objetivos de la Investigación

Ehhh....

Planteamiento y metodología

Ehhh....

Aportaciones originales

Ehhh....

Conclusiones

Ehhh....

Futuras líneas de investigación

Uf



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A multifrequency view of Active Galactic Nuclei

A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor in Science and Technology

by

Ignacio Ordovás Pascual

*“They both savoured the strange warm glow of
being much more ignorant than ordinary people,
who were only ignorant of ordinary things.”*

Discworld scientist at work
(Terry Pratchett, *Equal Rites*)

*“In order to make an apple pie from scratch,
you must first create the Universe.”*

Carl Sagan

Summary

Bullshit summary in english

Contents

Declaración de Autoría	iii
Agradecimientos	vii
Resumen en castellano	viii
Summary	xv
List of Figures	xix
List of Tables	xxi
1 Introduction	1
1.1 Active galactic nuclei	1
1.2 Aims of this thesis	1
2 Data	3
2.1 XMM-Newton	3
2.2 VLT/XSHOOTER	3
2.3 Optical telescopes	3
2.3.1 GTC	3
2.3.2 SDSS	3
3 Methods	5
3.1 The BUXS sample	5
4 Analysis of XSHOOTER	7
4.1 Motivation	7
5 Analysis of BUXS sample	9
5.1 Motivation	9
6 Conclusions and future work	11

A Tables	13
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References	15
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List of Figures

List of Tables

Chapter 1

Introduction

Observational evidence agn

1.1 Active galactic nuclei

1.2 Aims of this thesis

To finish it

Summarizing, along this work we will tackle the following issues:

1. Uno
2. Dos
3. Tres
4. Catorce

Chapter 2

Data

Surveys in X and then we look for counterparts in the optical.

2.1 XMM-Newton

Banter and more banter

2.2 VLT/XSHOOTER

Crap

2.3 Optical telescopes

Stuff and so

2.3.1 GTC

Bullshit

2.3.2 SDSS

Bullcrap

Chapter 3

Methods

3.1 The BUXS sample

X-ray studies

Chapter 4

Analysis of XSHOOTER

4.1 Motivation

None

Chapter 5

Analysis of BUXS sample

5.1 Motivation

None

Chapter 6

Conclusions and future work

Hoping to conclude it.

Appendix A

Tables

Along this appendix a table is presented

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