

ALPHONSA COLLEGE, PALA

(Affiliated to Mahatma Gandhi University)



SEISMIC WAVES

A Dissertation submitted to Mahatma Gandhi
University

In

Partial fulfillment of the requirements for the award of
Bachelor of science in physics

By

KEERTHY RAJ

SREELAKSHMI SATHEESH

REMYA RAJAGOPAL

Under the supervision of

Dr. Vijutha Sunny

Assistant professor, Department of Physics
Alphonsa College, Pala



HEAD OF THE DEPARTMENT OF PHYSICS
ALPHONSA COLLEGE, PALA

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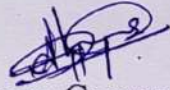


BACHELOR OF SCIENCE IN PHYSICS Department of Physics

AURORAS

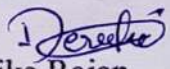
PROJECT REPORT

Submitted by,


Name: Alphonsa George

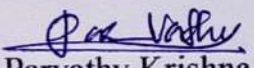
Course: B.Sc. Physics Model 2

Reg. No: 190021041949


Name: Devika Rajan

Course: B.Sc. Physics Model 1

Reg. No: 190021038462


Name: Parvathy Krishna P

Course: B.Sc. Physics Model 1

Reg. No: 190021038470




HEAD OF THE DEPARTMENT OF PHYSICS
ALPHONSA COLLEGE PALAI.

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Geophysical Surveying Methods

Submitted by,

Name: Anusri Saji

Course: B.Sc. Physics model 1

Reg No:190021038460

Name: Devika Raj

Course: B.Sc Physics model 1

Reg No: 190021038445

Name: Nandana Das V A

Course: B.Sc. Physics model 1

Reg No: 190021038467



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Department of physics

B.Sc Physics

SOLAR INVERTERS PROJECT REPORT 2019-2022

Submitted by:

Name: Pretty Jojo

Course: B.Sc Physics(Model 2)

University Register No: 1900210419044



Name: Divya TL

Course: B.Sc Physics(Model 2)

University Register No: 1900210419050

Name: Sandra Subhash

Course: B.Sc Physics(Model 2)

University Register No: 1900210419047



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Department of Physics

B.Sc Physics

**A study on the effect of solar
activity on ozone variation**

PROJECT REPORT 2019-2022

Submitted by,



Name: AMALIYA ELIZABATH
Course: B.Sc Physics (Model 1)
Reg No: 190021038438

Name: ASHLY K RARICHAN
Course: B.Sc Physics (Model 1)
Reg No: 190021038439

Name: JEES MONICA GEORGE
Course: B.Sc Physics (Model 2)
Reg No: 190021041951


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Department of Physics
B. Sc. Physics

Wireless Electricity Project Report - (2019-22)

Submitted by,

Janet Elizabeth James
Reg no:190021038466
B.Sc. Physics Model I

Novia Sunny
Reg no:190021038453
B.Sc. Physics Model I

Sneha Sabu
Reg no:190021038455
B.Sc. Physics Model I



A handwritten signature in black ink, appearing to be 'S' followed by a flourish.

HEAD OF THE DEPARTMENT OF PHYSICS
ALPHONSA COLLEGE PALAI.

ALPHONSA COLLEGE, PALA

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Department of physics

B.Sc Physics

STELLAR EVOLUTION

PROJECT REPORT 2019-2022

Submitted by:

Name : AISWARYA JOBY

Course: BSc Physics(Model 1)

M.G University Reg No: 190021038437



Name: ANJALI BABU

Course: BSc Physics (Model 1)

M.G University Reg No: 190021038459



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BACHELOR OF SCIENCE IN PHYSICS
Department of physics

**STUDY OF VARIOUS OPTICAL
PHENOMENA IN NATURE**

PROJECT REPORT

Submitted By,

Parvathi
Name: PARVATHI KRISHNA
Course : B. Sc. Physics (Model 2)
M. G. University Reg. No : 190021041943



Jisna
Name : JISNA MATHEW
Course : B. Sc. Physics (Model 2)
M. G. University Reg. No : 190021041952

Aneymol
Name : ANEYMOL SEBASTIAN
Course : B. Sc. Physics (Model 2)
M. G. University Reg. No : 190021041937

[Signature]
HEAD OF THE DEPARTMENT OF PHYSICS
ALPHONSA COLLEGE PALAI.

ALPHONSA COLLEGE PALA

**(Affiliated to Mahatma Gandhi University,
Kottayam)**



**Department of Physics
BSc Physics**

**EXOPLANETS AND THEIR DETECTION
USING RADIAL VELOCITY METHOD**

Project Report 2019-2022

Submitted by:

**Name: Alka Philip
Course: BSc Physics Model II
University Reg.No:190021041936**

**Name: Sona Rajesh
Course: BSc Physics Model II
University Reg.No:190021041948**




**HEAD OF THE DEPARTMENT OF PHYSICS
ALPHONSA COLLEGE PALAI.**

ALPHONSA COLLEGE, PALA

Affiliated to Mahatma Gandhi University



Department of Physics

B.Sc Physics

Possible effects of Electromagnetic Field on Human Health

Project Report – (2019-22)

Submitted by,

S. Gowri Krishna
Reg.no.:190021041946
B.Sc. Physics Model-II

Devika. R
Reg.no.:190021041940
B.Sc. Physics Model-II

Dona Alphonsa John
Reg.no.:190021041941
B.Sc. Physics Model-II



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BACHELOR OF SCIENCE IN PHYSICS
Department of Physics

DARK MATTER AND DARK ENERGY

PROJECT REPORT

Submitted By,

VARSHA MATHEW (190021038458)
CHRISTEENA JOSHY (190021038461)
NEETHU THOMAS (190021038469)


HEAD OF THE DEPARTMENT OF PHYSICS
ALPHONSA COLLEGE PALAI.

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Department of physics

B. Sc Physics

Characterization of Light Curves from GRS 1915+105
Black Hole system using Recurrence Plot Measures

PROJECT REPORT 2019-2022

Submitted by,

Name : DIVYA B

Course: B. Sc Physics (Model 1)

M.G University Reg No:190021038463

Name : NEETHU SEBASTIAN

Course: B. Sc Physics (Model 1)

M.G University Reg No:190021038468


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ALPHONSA COLLEGE, PALA
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Department of physics

B. Sc Physics

SLOAN DIGITAL SKY SURVEY (SDSS) PROJECT

PROJECT REPORT 2019-2022

Submitted by,

Name: ATHIRA P

Course: B. Sc Physics (Model 1)

M.G University Reg No:190021038442



Name: VISHNUPRIYA K G

Course: B. Sc Physics (Model 1)

M.G University Reg No:190021038474

HEAD OF THE DEPARTMENT OF PHYSICS
ALPHONSA COLLEGE, PALA.

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Department of Physics

B.Sc. Physics

SOLAR PHOTOVOLTAIC TECHNOLOGIES AND APPLICATIONS

PROJECT REPORT 2019-2022

Submitted by,

Name: ELIZABATH JOSE

Course: B. Sc Physics (Model 1)

M.G. University Reg No: 190021038447



Name: FIONA ALEX

Course: B. Sc Physics (Model 1)

M.G. University Reg No: 190021038448

Name: JESLIN RITA THOMAS

Course: B. Sc Physics (Model 1)

M.G. University Reg No: 190021038449

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ALPHONSA COLLEGE PALAI,

ALPHONSA COLLEGE, PALA

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Department of Physics

B.Sc Physics

WORKING AND CONSTRUCTION OF HEAT SENSORS

PROJECT REPORT 2019-2022

Submitted by,

Name: SYAMILY SIVADAS

Course: B.Sc Physics (model 1)

MG University Reg No:190021038457



Name: JESLINE JOSEPH

Course: B.Sc Physics (model 1)

MG University Reg No:190021038450

Name: ASWARA KP

Course: B.Sc Physics (model 1)

MG University Reg No:190021038440


HEAD OF THE DEPARTMENT OF PHYSICS
ALPHONSA COLLEGE PALA

CERTIFICATE

This is to certify that the project entitled, "SOLAR INVERTERS" is a bonfire record of the work done by Pretty Jojo (PRN NO:190021041944), Divya TL (PRN NO:190021041950), Sandra Subhash (PRN NO:190021041947), under my guidance, in the partial fulfilment of the requirement for the accord of the degree of Bachelor science in Physics, during the academic year 2021-2022.

Project Guide

Sr. Sherly Joseph
36/03/2022

Dr. Sr. SHERLY JOSEPH
Department of Physics
Alphonsa College, Pala



2022/10/12 15:10

Certificate

This is to certify that the project entitled "**GEOPHYSICAL SURVEYING METHODS**" is a bona fide record of the work done by DEVIKA RAJ (190021038445), ANUSRI SAJI(190021038460),NANDANA DAS VA(190021038467) under my guidance, in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science in Physics, during the academic year 2021-2022.

Project Guide

Dr. Sr. Priya Antony

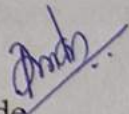
Department of Physics

Alphonsa College, Pala

2022/10/12 15:09

Certificate

This is to certify that the project entitled "Wireless Electricity" is a bonafide record of the work done by Janet Elizabeth James (190021038466), Novia Sunny (190021038453), Sneha Sabu (190021038455), under my guidance, in the partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Physics, during the academic year 2020-2021.


Project Guide
Ms Cincila T Joy
Assistant Professor
Alphonsa College, Pala.

Certificate

This is to certify that the project entitled "Stellar Evolution" is a bona fide record of the work done by Aiswarya Joby (190021038437), under my guidance, in the partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Physics, during the academic year 2021-2022.

Project Guide

Sr. Priya Anthony

Assistant Professor

Alphonsa College, Pala

2022/10/12 15:09

ALPHONSA COLLEGE, PALA

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CERTIFICATE

This is to certify that the project work entitled "**POSSIBLE EFFECTS OF ELECTROMAGNETIC FIELD ON HUMAN HEALTH**" is a bonafide report of the project done by **DEVIKA R (190021041940)**, **DONA ALPHONSA JOHN (190021041941)** and **S GOWRI KRISHNA (Reg No:190021041946)** during the academic year 2019- 2022 for the partial fulfilment of the requirements for the award of the degree of **Bachelor of Science in Physics** from Mahatma Gandhi University, Kottayam

Guide:

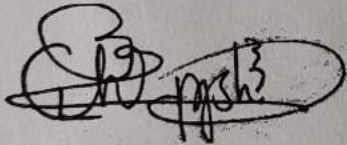
Ms.Rekha Mathew

Department of Physics

Alphonsa College, Pala

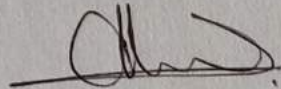
CERTIFICATE

This is to certify that the project entitled 'EXOPLANETS AND THEIR DETECTION USING RADIAL VELOCITY METHOD' is a bonafide record of the work done by ALKA PHILIP (190021041936) and SONA RAJESH (190021041948) during the academic year 2019-2022, for the partial fulfilment of the requirements for the award of the Degree of Bachelor of Science in Physics from Mahatma Gandhi University, Kottayam.



Guide:

Dr. Charles Jose
Assistant Professor
Department of Physics
Cochin University of Science and
Technology. (CUSAT)



Teacher in Charge:

Dr. Minu Joy
Assistant Professor
Department of Physics
Alphonsa College Pala

2022/10/12 15:08

ALPHONSA COLLEGE, PALA

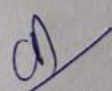
(Affiliated to Mahatma Gandhi University, Kottayam)



CERTIFICATE

This is to certify that the project work entitled "**STUDY OF VARIOUS OPTICAL PHENOMENA IN NATURE**" is a bonafide report of the project done by JISNA MATHEW (Reg. No. 190021041952), PARVATHI KRISHNA (Reg. No. 190021041943), ANEYMOL SEBASTIAN (Reg. No. 190021041937) during the academic year 2019- 2022 for the partial fulfilment of the requirements for the award of the degree of **Bachelor of Science in Physics** from Mahatma Gandhi University, Kottayam

Guide:


MS.CINCILA T JOY
Department of Physics
Alphonsa College Pala

2022/10/12 15:08

CERTIFICATE

This is to certify that the project entitled "**Solar Photovoltaic Technologies and Applications**" is a bonafide record of the work done by, students under my guidance, in the partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Physics, during the academic year 2021-2022.

Project Guide:

Domb
16/5/2022
Ms Cincila T Joy

Assistant Professor

Alphonsa College, Pala

2022/10/12 15:07

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(Affiliated to Mahatma Gandhi University, Kottayam)



CERTIFICATE

This is to certify that the project work entitled "**DARK MATTER AND DARK ENERGY**" is a bonafide report of the project done by Varsha Mathew (190021038458), Christeena Joshy(190021038461) and Neethu Thomas (190021038469) during the academic year 2019- 2022 for the partial fulfilment of the requirements for the award of the degree of **Bachelor of Science in Physics** from Mahatma Gandhi University, Kottayam

Guide :

Dr. Sr. Sherly Joseph
Dept.of Physics
Alphonsa College Pala

Sr. Sherly Joseph
36/03/2022



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CERTIFICATE

This is to certify that the project work entitled “**PHYSICS IN GREEN PLANTS**” is a bonafide report of the project done by ATHIRA SANTHOSH (190021041939), REKHAMOL T.R (190021041945) and RICHU LIZ ROY (Reg No:190021041954) during the academic year 2019- 2022 for the partial fulfilment of the requirements for the award of the degree of **Bachelor of Science in Physics** from Mahatma Gandhi University, Kottayam

Guide:

Dr. Sr Sherly Joseph
Department of Physics
Alphonsa College Pala

Sr. Sherly Joseph
30/03/2022



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2022/10/12 15:07

CERTIFICATE

This is to certified that the project work entitled "AN ALTERNATIVE SOURCE OF ENERGY FORNATIONAL DEVELOPMENT" is a bonafide record of the work done by SREEKAVIYA.M, (190021041955), ANUMOL GEORGE (190021041938), JISSYMOLJIJI (REGNO:190021041942), under my guidance, in the award of the Degree of Bachelor Physics, during the academic year 2019-2022.

Vijutha Sunny
16/5/2022

Project Guide

Dr. Vijutha Sunny

Department Of Physics

Alphonsa College, Pala

CERTIFICATE

This is to certify that the project entitled "Working and Construction of Heat Sensors" is a bonafide record of the work done by **Syamily Sivadas, Jesline Joseph, Aswara KP**, under my guidance, in the partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Physics, during the academic year 2021-2022.

Project Guide

Ms Rekha Mathew

Assistant Professor

Alphonsa college, Pala



2022/10/12 15:06

Certificate

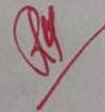
This is to certify that the project entitled "SATELLITE COMMUNICATIONS" is a bona fide record of the work done by GOWRI SANKARI M (190021038464), SARAH J MARIYAM(190021038472), SNEHA RAJESH(190021038473) under my guidance, in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science in Physics, during the academic year 2021-2022.

Project Guide

Ms. Rekha Mathew

Department of Physics

Alphonsa College, Pala

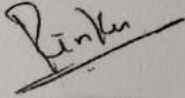


2022/10/12 15:06

CERTIFICATE

This is to certify that the project entitled "**Characterization of Light Curves from GRS1915+105 Black Hole system using Recurrence Plot Measures**" is a bona fide record of the work done by **Divya B (190021038463) and Neethu Sebastian (190021038468)**, under my guidance, in the partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Physics, during the academic year 2019-2022

External Guide :



Dr. Rinku Jacob

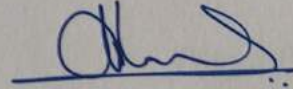
Assistant Professor of Physics

Rajagiri school of Engineering

& Technology (RSET), Kakkanad

and Visiting Associate of IUCAA, Pune.

Internal Guide:



Dr. Minu Joy

Department of Physics


Alphonsa College , Pala

2022/10/12 15:06

CERTIFICATE

This is to certify that the project entitled "**Sloan Digital Sky Survey (SDSS)**" is a bona fide record of the work done by **Athira P (190021038442) and Vishnupriya K G (190021038474)**, under my guidance, in the partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Physics, during the academic year 2019-2022

Project Guide,



Dr Minu Joy

Assistant Professor

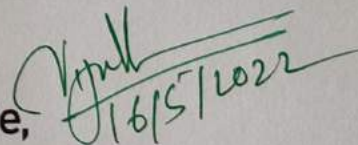
Alphonsa College, Pala

2022/10/12 15:06

CERTIFICATE

This is to certify that the project entitled "Spacecrafts" is a bona fide record of the work done by Aswathy K S (190021038441), Karishma S (190021038451), and Sandra Raj M (190021038454) under my guidance, in the partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Physics, during the academic year 2020-2021.

Project Guide,


16/5/2022

Dr Vijutha Sunny
Assistant Professor
Alphonsa College, Pala

CERTIFICATE

This is to certify that the project entitled, "Black Hole Thermodynamics" is a bonafide record of work done by "Carol Sunny", "Cinfy K", "Dona Mariya Biju" in partial fulfillment of the requirements for the award of "Bachelor of Science in Physics is an authentic work carried out by them under my supervision and guidance. To the best of my knowledge, the matter embodied in the project has not been submitted to any other University/Institute for the award of any Degree or Diploma.

Place :Pala

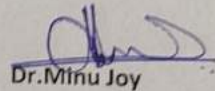
Date:



Dr.Tharanath R

Aquinas college , Kochi

(External guide)



Dr.Minu Joy

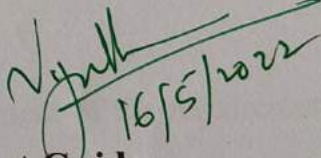
Alphonsa college , Pala

(Internal guide)

Examiner:

CERTIFICATE

This is to certify that the project entitled, "SEISMIC WAVES" is a bonafide record of the work done by "KEERTHY RAJ", "SREELAKSHMI SATHEESH", "REMYA RAJAGOPAL" under my guidance, in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science in Physics, during the academic year 2019-2022.


Project Guide

Dr. Vijutha Sunny

2022/10/12 15:11

CERTIFICATE

This is to certify that the project work entitled "AURORAS" is a bonafide report of the project done by ALPHONSA GEORGE (Reg.No:190021041949), DEVIKA RAJAN (Reg No: 190021038462), PARVATHY KRISHNA P (Reg No: 190021038470) during the academic year 2019-2022 for the partial fulfilment of the requirements for the award of the degree of **Bachelor of Science in Physics** from Mahatma Gandhi University, Kottayam.

Project Guide:


Dr. Sr. Priya Antony

Department of Physics

Alphonsa College, Pala

2022/10/12 15:10

CERTIFICATE

This is to certify that the dissertation entitled “ **A STUDY ON THE EFFECT OF SOLAR ACTIVITY ON OZONE VARIATION**” is a bonafide record of work done by Amaliya Elizabeth, Ashly K Rarichan, Jeess Monica George under my supervision in partial fulfillment of the requirement for the award of the degree (CBCS) of Bachelor of Science in Physics of MG University.

Dr. C. T. Joy
16/5/2022

Ms. Cincila T Joy

(Supervising Guide)

2022/10/12 15:10