3.1 PM to 4.45 PM : Academic Session IV Topic : A Gentle Introduction to Numerical Methods-Part I : Dr. K. P. Naveenachandran Adjunct Faculty, Dept. of Mathematics, Cochin University of

2018 October 13

Science & Technology, Kochi

9.30 AM to 11.00 AM : Academic session V

Topic : Astro sat-India's First Space Observatory
: Dr. Annapoorni Subramaniam, Scientist C,
Indian Institute of Astrophysics,
Bangaluru, Karnataka

11.00 AM to 11.15 AM : Tea Break

11.15 AM to 12.45 AM: Academic session VI

Dr. K. P. Naveenachandran Adjunct Faculty,
Dept. of Mathematics, Cochin University of
Science & Technology, Kochi

12.45 AM to 1.15 PM : Luch Break

1.30 PM to 3.00 PM : Academic Session-VII

Topic : Quantum Computations An Introduction
: Sri. Prajit Chandran Asst. Professor in physics
Thunjan Memorial Govt. College Tirur,
Malappuram, Kerala

3.00 PM to 3.15 PM : Tea Break

3.15 PM to 4.45 PM : Academic Session VIII

Topic : Quantum Weak Measurements and Applications

Sri. Prajit Chandran Asst. Professor in Physics

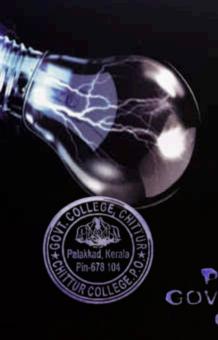
Thunjan Memorial Govt. College Tirur,

4.45 PM to 5.15 PM : Valedictory Session

Malappuram, Kerala

DEPT. OF PHYSICS

Govt. College, Chittur



Two day National Seminar on

Computational Physics:

Simulating the Universe October 12 & 13, 2018 Venue : Physics Gallery

process of discovering the hidden laws of nature. This initiated the in the form of Theoretical physics. These two methods, Experimental methods in physics, first by Newton, and later, by giants like Laplace, branch of experimental Physics. Soon After, the use of mathematical when Galileo established the importance of experimentation in the only helped to crack the most difficult of codes in theoretical physics the mid-Twentieth century, the increasing complexity in the and theoretical, has formed the edifice of physics ever since. Around Hamilton, Maxwell and others, ushered in the second paradigam shift possible what was once deemed impossible. but also introduced the powerful concept of simulation. This made discovery which was later known as Computational physics. It not of Computers, combined together to open a new pathway of mathematics involved, as well as rapid advances in the development Physics, the study of nature, received its first paradigm shift

new method for exploring the unknown. We cordially invite you to utilize this oppurtunity to understand the Cosmology. Astrophysics, Quantum physics and Quantum computing. handled by well known personalities who are experts in the fields of computational physics on October 12 & 13, 2018. The sessions are College, Chittur is organizing a two day national seminar on or economics. It is with this viewpoint that the Dept. of physics, Govt excel in any field of study which may be as diverse as physics, biology physics cannot be over emphasized. Any student of physics should have a rudimentary knowledge of computational methods if one is to The importance of computational methods in present day

Sri.Vijayakrishnan, M. V, Co-ordinator

Prof. Anand Viswanath. R Principal

2018 October 12

9.00Am to 9.30 AM 8.30 AM to 9.00AM Inaugural session Registration

Prayer

Dr. Prasia. P Asst. Prof. In Physics

Welcome Speech

Sri. Vijayakrishnan. M. V, Head, Depi Govt. College Chittur

Presidential address

Prof. Anand Viswanath. R

inaugural address Inauguration & Principal, Govt. College, Chittur

Felicitations

Sri. Ramabadran C. D, Sri. Jagannathan. C, PTA Secretary Asst. Prof. In Physics, Govt. College Chitteur

Mr. Shabir. M. B, U. U. C

Sri. Shinelal. E, IQAC Co-ordinato

Smt. Bindu. M, Asst. Prof. In Physics Govt. College Chitttur

Vote of Thanks

9.30 to 11.00 Am Academic session I

Exploring Nature with Computers-Part I

Dr. K. Indulekha, Prof. & Head, School of Pure and Applied Physics, MG. University, Kottayam Advancement of Science) (Member, American Association for the

11.00 to 11.15 AM Tea break

11.15 AM to 12.45 PM: Academic Session II

Topic

Exploring Nature with Computers-Part II

12.45 PM to 1.30 PM : Lunch break Dr. K. Indulekha, Prof. & Head School of Pure and applied Physics, MG. University, Kottayam

1.30 PM to 3.00 PM Academic Session III

Computational Quantum Mechanics

Prof. V. N. Purushothaman, Asso. Professor (Rtd) Dept. of Physics, Sree Kerala Varma College, Thrissur

3.00 PM to 3.15 PM : Tea break

'COMPUTATIONAL PHYSICS - SIMULATING THE UNIVERSE'

Octobe: 12 & 13, 2018

Dept. of Physics, Govt. College, College

Sponsored by Directorate of Collegiste Education Covt. of Karala

Registration Form

Sl.No.	Name and Designation	Official Address	Signature
1.	Dr. Sudheesh v.D. Assortion Professor	Dept - of physics. NSS College Nemmara	DM.
2.	SANAL KUMAR-S. USSISTANT PROJUSCUY	nept of Instrument	tation and
3.	9= 1.1.61 C-	Dept of Phys	Moh.
4.	Preetha. k. c Asst. Profesion	Dept of physics S. N. college, Notes	Pret
5.	Nayang-le Asst-prof.	Dept. of physics N.S.S College Ottapalam	NB
6	Mohsina. K Asst. Professor	Dept of Physics M.E.s Kalladi College, Mammarkke	A Construe
7.	Priyante. H M. Sc, Physics NSS college, Ottopala	di COLLEGIA	Roger

J.No.	Name and Designation	Official Address	Signature
g.	Aan Scenevilla. Asst. Professe.	Dept of Phyrico Mercy College	do-
q.	Dr Regi : T Asst. Posteror	Legt. of Mathematics Coult college, Christman	Sun /
175		Dept. & Mathematics Govt College Chilture	R
Ħ	Mary Shall T. J Asst. Professor	Dept of Mathematics Govt College Chittur	Stolet
12	Deepa.V Aust. Projessor	Dept-of Mathematica Gart College Chitter	*
13	Dr. Veena 1-G. Asst-Professor	Dept. of Statistics Govt. College Cham	De
14,	Dr. Sarada karangac Asst. Peofess of chemistry. G.C	la pept 9.1	Joseph .
15.	Saranga t. P Asst. Professor	Dept. 08	Lecano
16	Benn Mol T.V. Asst Professor	computersiero	& reof
172	Jankajakshon. P Assf. Projesser GCC	Geography	De sala

PRINCIPAL GOVT, COLLEGE CHITTUR

No.	Name and Designation	Official Address	Signature
3	V Govindan lasty Asst. mg Geography	Dept. of Geography GCC	de
7	DR. Barin V.P. Asst Professo & Flectgonia	Dept. of Electron. Good College Britton	Barro
	Dr. G.N. Possanth Associal rof. in Mathematics	Dept. of Mathematics Cr. C. C.	
? (.	Dr. Rijulal G. Aget - Prof. in Chemistry	Dept. of Chemistry. Crost. Callege, Chillie	1
22	Swish Kurner K. A. Ant-Progenoin Botay	Dept. of Boton, Crowt-College, Chither	Sho
23.	Dr. Sojan Asst. Progessor in Botony	Dept of Botang. Yout College, Withen	Pour
24	Prajith .	Dept. of Botay gout. College, Chitter	Dette
25	Dr. Shinelal E. Asso. Prof. in Mathematics	Dept. of Mathematics yout College, Chittur	Smile
26.	Saritha Chandran Asst. Prof. in Mathematics	Dept. of Mathematics. Gout. College, Chittin	Barthe
27.	Dr. Bajeer Kumar S. Aut. Prof. in Malayalam	Dept Malaydon Grafie Alian Chitter Palakkad Grala R	

No.	Name and Designation	Official Address	Signature
28	K. Rahim Asst. Prof. in Malayalam	Dept of Malgydam. Goot College, Chilter	Q No.
29.	Dr. Anjana V.R. Asst. Professor in Malgyalam	Dept. of Malayaban, Crout. Collyc, Chitter	
30.	Dr.B. Steekumar Associate Professor.	Dept. of Malayalan. Crovt. College, Chiller	Brown.
31.	Dr. Nishamol M.S. Aut. Prof in Electronies	Dept. of Electronia	Contraction of the second
32	D. Sneyithon New Y Asst Parfessor	Dept. Of Electronic Grout College Chitten	South-
		COLLEGE CH	
		Palakkad, Kerala Pin-678 104 P	PRINCIPAL OVT. COLLEGE CHITTUR

'COMPUTATIONAL PHYSICS - SIMULATING THE UNIVERSE'

October 12 & 13, 2018

Dept. of Physics, Govt. College, Chittur

Sponsored by Directorate of Collegiate Education, Govt. of Kerala

October 12, 2018 FN

SI.No.	Name and Designation	Official Address	Signature
ı	Ama Scurevilla Assistant Professon.	Dayl of Physics Herey College. Paratatad.	Age.
2	Nayana-1c Assl. Port.	Dept of physics N.s.s College OHapatem	NLS
3	Preetha. k. C Asil · Rofenoa.	S.N. college, Nattice	Paceh
4	SANAL KUMAR-S USST: Professor	Nest college, Nemmara.	itulian,
5.	Sudheesh V.D. Ast. Profesor	Ness College (DA.
6.	Mohsina. K Asst. Professor	Dept-of Physics M.E.S Kalladi College, Mannarkkad	Consina
r.	Dr. Reji. T Asst. Protessor	Sept. of Mallumatus ant-Vollye Chitter	Ros

PRINCIPAT GOVT, COLLEGE CHITTUR

1			
No	Name and Designation	Official Address	Signature
8.	Ruby-R Asst Parfesson	Dept. of Mathematics Gort College Clither	2
	Mary Shalet T.J. Asst. Professor	Det of Mathematics Grout College Chithus	Jak
10		Govt College Chittur	* *
11 -	Dr. Veena 1.5. Ans. Professor	Dept of Stadie Cis Gover College ather	
12.	Smot. Sarænger. E-P Asst. Akopessor	Apt. Of cham Gourf. Cotteger, chetter	Juxan
13.	Bine HolT.V. Asst-Progessos	Compuler science	
14	Pankagalcsham.P Assa Brolesso	Geography	Paul
5	vgovindankutty	Geography	#
s C	Da. Barin VA.	Electronics. God College Q	Marines Con
		Palakkad, Kerala Pin-678 104	PRINCIPAL DVT. COLLEC
			CHITTUR

No.	Name and Designation	Official Address Signature
18	Dr. G.N. Prasanth Asct. Prof in Mathematics	Crost. College, Chatter on Paris
19	Dr. RIJULAL G. ASST. PROFESSOR	Dept. of Chemistry Bout. College. Chiller go
20	SORESTH KUMAR K. A. ASST. PROFESSOR	GOUT COLLEGE CHITTER
21	DR. SOJAN ASST. PROFESSOR	CHITTUR BOTANY
22	PRAJITH (FIP)	OUT-COCCEGGE CHUTTUR
23	Dr. Shinclal E. Arrociate Profession in Mathematus	Rot of Mathematica Cort College Chiter
24	SARITHM CHANDRAN ASSITTANT PROFESSOR	COUT. COLLEGE CHITCUR Bantha
25.	Dr. SATEEU KUMAR S. ASST. PROFESSOR	DEPT- OF MALAMALAM GOVE-COLLEGE CHITTUR
	K. RAHIM ASST- PROP. IN MACAGAGAM.	DEPT. OF MACAPEAN GOUTE COLLEGE CHITTUR
'7	Pr. ANJANA U.R. ASST. PROFESSOR	Cout. Parklad, Kerala & PM-678 104
		GOVT. COLLEGE CHITTUR

'COMPUTATIONAL PHYSICS - SIMULATING THE UNIVERSE'

October 12 & 13, 2018

Dept. of Physics, Govt. College, Chittur

Sponsored by Directorate of Collegiate Education, Govt. of Kerala

October 12, 2018 AN

SI.No.	Name and Designation	Official Address	Signature
1	Anu Scumvilla. Assistant Professor.	Dept of Physics Mary College	1
2	Preetha. K. C Assistant Professor	Depte of Physics S. N. college, Note	Pert
3	Sudhersh N.D Assistant Professor	Dept of physos NSS College Norman	
4.	SANAL KUMAR-S Assistant Drofessor	Dept: y anstur	nmarci 9
5-	Naya ora. le Assi · Prof.	N.S.S college, Ottopalam	طله
6	Mohsina. K Asst. Professor	Dept of Physics	ad - Cheme
7.	Dr. Rigi. T Asst. Profusor	Dept of Mullenshis	

GOVT. COLLEGE CHITTUR

No.	Name and Designation	Official Address Signature
	Ruby.R Asst Portessa	Dept at Mathematics Govt. College Chitture
9.	Morry Shalet T. J. Asst. Professor	Dept of Milhoratics. Cont College Unither Shoot
(0	Deepa. V Asst. Professor	Dept-gHalheraku Gort-College Chittur
η	Dr Veena 1.5. Asst-Professor	Dept. of Statistic Je Govt. College Chothen
12.	Dr. Sarada karong. Azot. Paufosov	des Dept of Bradele Cr. c. c.
B .	Stor. Saksenga K.P.	Covincolleges Covincolleges
14.	Binu Mol T.V. Asst. Profesor	Samo Palin Cicc
	Pankajakshar Prozesser	Geography Janly gry
(6	2. C. Jan Culta	Geography gle
רן (Dr. Savin 29. Ast Reofose g.	Cov (Separation of the Palakker Kerala & No.678 104
		GOVT. COLLEGE CHITTUR

1	Name and Designation	Official Address Signature
18	Dr. G.N. Prasanth Asst. Professor ~ Mathematics	Part. of Mathematica Crout. College, Chitter on free
	Dr. RISULAL G. ASST. PROFESSOR	Dat. of Chemistry Govt. College Chittus
20	Suresh Kumor K.A. Apst. Professor	Dept. of Botany hort. College Chitter
21	Dr. SOJAN ASST PROFFISION	Dont of Botany Dont of Botany Dont of Botany
22	PRAJITH (FIP)	Root-College Chittees Depth
23	ProShinelal E. Associate Professor in Mathematus	Post- of Betany Got-College Chitter Sunda E Court. College, Chitter Sunda E
26	SARITHA CHANDRAN ASST PROFESSOR	Dept of Mathematics Crost College, Chittae Jantha
25	Dr. SAJZEUKUMAR S. ASST. PROFESSOR	Dept-of Malayalan Goot-College, Chittur
	K. RAHIM ASST. PROFE CSOR	Dept- of Malayalam God- Gollege Chitter Que
27	Dr. ANTANA V.R. AST. PROFESSOR	Dept. Mahyalan Crout College Chither PRINCIPAL
-		GOVT. COLLEGE CHITTUR

'COMPUTATIONAL PHYSICS - SIMULATING THE UNIVERSE'

October 12 & 13, 2018

Dept. of Physics, Govt. College, Chittur

Sponsored by Directorate of Collegiate Education, Govt. of Kerala

October 13, 2018 FN

SI.No.	Name and Designation	Official Address	Signature
t	Horn Schenvilla. desidant Professor.	Dept of Physics Meney College	Ann.
2	SANAL KUMAR-S Assistant projector	nept: of onstar	mentation
3.	Sudheesh V.D. Arostont Professor	Despt - of physics NSS Gillege nominan	(DD
hp.	Preetha. k c Asstr Profesor	Dept. of Physics S. N. College, Nathios	Prech
5.	Nayana-le Asst- Prof.	Dept-of physics N.s.s college oflapalam	NLS
6	Mobsina. K Asst. Professor	Depl. of Physic M.E.s. Kalladi Gliege, Mannark	631.5mg
T.	Dr. Reji. F Azst. Protesser	Dept-of Mathem	

J.No.	Name and Designation	Official Address	Signature
8	Ruby R Asst. Pootesser	Deft. of Mathematics Govt. Cottage Chittur	
9.	Mory Shalet T. J. Asst. Professor	Dept of Malhematica Geort College Chiller	John
lo	Deepa. V Assi. Professor	Dept of Halberdin	*-
11	Dr. Veena 1G. Asst-Pryfessor	Dept-y Statistics Govt. College Och	- H
12.	Dr. Bereda karange Asst Perfessor	do Dept of A Crece	Sandle
	Savanga. t.p. Asst. Atopessoi	Dept. of Demitty & G.C.C	
14.	Binu Mol 7.V. Asst. Professor	Conjuli Scieno	& rest
15.0	Pankajakshan P Alst- Projesses	Geography	Janlysky
l6	V Govindanka Hy	Geography	ah O
(7 ^C	DR. Barin. V.J. Asst. Zkofescol	Peple Colored in the Cook of Colored C	VI. COLLEGE

,No.	Name and Designation	Official Address	Signature
18	Dr. G.N. PRASANTH. ASST. PROF. IN MATHEMATICS	DEPT. OF MATHEMATICS GOOT. COLLEGE, CHITTO	a Ray
	Dr. Rijulal G. Assistant Dofine in Chamitry		in c
20	Assistat Insterior	Dort . Colye. Chiller	Spire
21	Dr. SOTAN ASST. PROFESSOR	DOUT. COLLEGE CHITTUR	Powi
22.		DEPT- OF BOTH CHITTUR	E North
23	Dr. Shinelal E. Acsociate Reference in Mathematica	Root Collyer, Chiller	9
24	Saritha Chandron Asrt Prf. in Mathematic	Dept. of Mathematica Court. College, Chitter	& and the
25.	Pr. SATEEN KUMARS	MALAMALAN CHOCKEGE, CHO	in more
26.	K. Rahim Asst. Prof in Malgralam	Port - of Malya	Two day
27.	Dr. Anjana V.R. Asst. Prof. in Malaydon		IL RINCIPAL

No	Name and Designation	Official Address	Signature
8 A	X. B. Svenkurrer Associate Professor in Malyala	Dept. of Malgalan	8 ft an
D	· Nishamol M.S sot. professor of Electronis	Dept of Electro Crost. college Chitture.	
	ssi Professor	Deast of Elastonia	e Sujt
Ī			
		Palakkad, Kerala	Ra
		Pin-678 104 ST	PRINCIPAL COLLEG CHITTUR

'COMPUTATIONAL PHYSICS - SIMULATING THE UNIVERSE'

October 12 & 13, 2018

Dept. of Physics, Govt. College, Chittur

Sponsored by Directorate of Collegiate Education, Govt. of Kerala

October 13, 2018 AN

SI.No.	Name and Designation	Official Address	Signature
1	Anne Scanwilla. Assistant Referen	Dept & Thyris Mercy college	Ann.
2.	Preetha. k. C Asst. Professor.	Dept-of Physics S.N. College, Natha	
3.	SANAL KUMAR.S Ussistant projecter.	nept. of Inst.	umentation Vennmena £
4.	Budhersh N.D. Arsished Professor	Ness College Nemmara	
٠-	Nayana. 1c Asst. Prof.	Dept of Physics N-S:S college OHAPALOM	NB
6.	Mobsina. K Asst. Professor	Dept of Physics M.E.S Kallardi Collage Mannavi	
	Dr. Rin T Asch Postessor	Rept. of Matheret	

A No.	Name and Designation	Official Address	Signature
8.	Ruby. R Asst. Porotessor	Deft. of Mathonal Govt. College Chittur	Fu D
9.	Mary Shald T.J. Asst Professor	and allege Chiller	Sholest
10	Deepa. Y AMI Professor	Dept of Hathersalis Govt College Chittur	
11	Dr. Veena 16.	Dept of State Co.	· the
12.	Dr. Serada karanged Agest. Perfessor	CI.C.C	msry Javedie
13.	Asst. Professor	Chemistry	& exemple)
14	Binn Mol J. V. Asst. Professor		So real
15	Pankajaleshar P ASSA. Foolesses	Geography	Somhy of
16	V govindantalty	Dept. of Geography	1 9 -
17	DA. Sarin. V.P. Asst. Professor in Electronic	Dept Palakkad, Kerala A Pin-678 104	PRINCIPAL
		· LULLO	CHITTUR

5	Name and Designation	Official Address	Signature
18. APS	G.V. Prasonth t. Professor in ratherates	Dept. of Notionatin Got. College. Chithr	an Pray
19. As	r. Rijulul G.	Dopt. of Chemistry Goot. College, Chiller	ap) c
20 S	URESH KUMAR K.A. SST. PROFESSOR	COUR-COLLEGE, CHITTOLE	Sha
21. ASS	r. SOJAN ST. PROFETOR	DEPT. OF BOTANY GOUT · COLLEGE CHITTUR	Post
(//	FIP)	DEPT. OF BOTANY ADUT. COLLECT CHITCH	Sig-tu
23.	X. Shinelal E. Jesociate Professor	Opt. of Mathemalian Onet. College. Chiller	Sind !
24	SARITHA CHANDRAN ASST. PROF. IN MATHEMATILIS		Sair
25. A	DR. SATEEN KUMAR. S.	CHITTUR	- Mary - mary
- 1	RAHIM SPT. PROFESSOR	DEPT- OF MALAYALAN GOUT- COLLEGE CHITTUR	a se.
27 1	OST. PROFETS DO	GOUT EDUCATE COM	Roger

gazer excepted along uni-	
Name and Designation	Official Address Signature
Dr. B. SREEKUMAR 28 AISOCIATE MODESSOR IN MACAYALAM	GOVT. COLLEGE SASAN.
Dr. Nishamol M S 29 Ast. Professer of Electronics	
30 Asst. possessor of Electronics	Dept of Electronics Gent Gloge Congt
	Palakkad, Kerala Pin-678 104 COLLEGE
	CHITTUR

REPORT

on

'COMPUTATIONAL PHYSICS - SIMULATING THE UNIVERSE'

Two Day National Seminar

organized by

Dept. of Physics, Govt. College, Chittur

On

October 12 & 13, 2018

Sponsored by

Directorate of Collegiate Education

Kerala





TWO DAY NATIONAL SEMINAR ON 'COMPUTATIONAL PHYSICS SIMULATING THE UNIVERSE'

A two day national seminar on 'COMPUTATIONAL PHYSICS - SIMULATING THE UNIVERSE' was organized by the Dept. of Physics, Govt. College, Chittur on 12 & 13, October, 2018. The seminar was sponsored by the directorate of Collegiate Education, Government of Kerala. The participants and resource persons arrived at the college premises on 12 & 13, October, 2018. The registration began at 8:45 AM on 12th October, 2018 and a total of thirty participants registered their names. The objective to conduct such a seminar on the above said has its own relevance since the rapid development in all areas of Physics necessitates one to keep in touch with every major breakthrough. The topics chosen also highlight this important aspect.

DAY - 1

12 OCTOBER, 2018

Inaugural Session

The function began with a prayer song by the chorus group. Next, Smt. Prasia P., Assistant Professor, Dept, of Physics, Govt. College, Chittur welcomed all the guest participants, resource persons and eminent guests with words and garlands on behalf of the organizing committee. This was followed by the presidential address by Sri. Vijayakrishnan M.V., Head, Dept. of Physics, Govt. College, Chittur, who also was the coordinator of the seminar. It was followed by the ceremonial lamp lighting by Sri Anand Viswanathan R, Principal, Govt. college, Chittur. After the inauguration, Sri Anand Viswanathan K, Principal, Govt. college, Chittur Jellyered, the

Palakkad, Kerala

inaugural speech. She elaborated on the importance of keeping update with frontier research on every area of Physics, in particular those areas having interdisciplinary character. Next, Sri Ramabadran C D, Assistant Professor, Dept. of Physics, Govt. College, Chittur, Sri. Jagannnadhan C, Secretary, PTA, Govt. College, Chittur, Dr. Shinelal E, IQAC Coordinator, Govt. College, Chittur and Sri Shabir M B, U. U. C delivered felicitation speeches. The inaugural session concluded with a vote of thanks by Smt. Bindu C, Assistant Professor, Dept. of Physics, Govt. College, Chittur.

9:30 AM to 11:00 AM - Academic Session I - Exploring Nature with Computers Part I:

The first session by Dr. K Indulekha began at 9:30 AM. The talk focused on the methodology and scope of physics as a study of nature. The different disciplines of physics were introduced and the calculational aspects of these branches were elaborated.

11:15 AM to 12:45 PM – Academic Session II – Exploring Nature with Computers Part II:

The second part of the talk by Dr. K Indulekha began at 11:15 AM. The lecturer stressed the need for powerful computing machines. The role of computers in obtaining exact or approximate solutions for physical problems was emphasized.

1:30 PM to 3:00 PM - Academic Session III - Computational Quantum Mechanics: The third academic session was held by Sri. V. N. Purushottaman, on the topic of computational quantum mechanics. The basic principles of quantum mechanics and its applications at an elementary level were presented. The various numerical methods for solving the Schrödinger equation was elaborated and some sample problems were solved using special computational techniques. The lecture helped in understanding the practical side of quantum theoretical calculations.

Palakkad, Kerala

3:15 PM to 4:45 PM - Academic Session IV - A Gentle Introduction to Numerical Methods
- Part I: The fourth session dealt with an introduction to the basic aspects of numerical computing. It was presented by Dr. K P Naveenachandran. Several useful numerical techniques like the Monte Carlo method were presented replete with examples.

DAY - 2

13 OCTOBER, 2018

9:30 AM to 11:00 AM - Academic Session V - Astrosat - India's First Space Observatory:

The first session of the second day of the seminar was on Astrosat, India's first space observatory. The talk was delivered by Dr. Annapoorni Subramanium. Starting from the basics of observational Astrophysics, the talk proceeded to the latest technological innovations in the field of space physics. It introduced the Astrosat satellite and the details of the mission were clearly outlined. The talk provided much motivation in this field of contemporary research.

11:15 AM to 12:45 PM - Academic Session VI - A Gentle Introduction to Numerical Methods - Part II: The second part on the numerical methods of mathematical physics dealt with some advanced topics which are very important in the current research field of computational physics. Some simple but important problems were solved using these techniques and the talk provided a pathway to the exciting field of numerical computing.

1:30 PM to 3:00 PM - Academic Session VII - Quantum computation An introduction: The talk was presented by Dr. Prajit Chandran and dealt with one of the most exciting new fields of applied physics. The basic ideas of classical computing were first elaborated and then the specialties of quantum mechanics were presented. This was followed by a detailed analysis of





the techniques of quantum computing and the radical difference between classical and quantum computational techniques were clearly brought out.

3:15 PM to 4:45 PM - Academic Session VIII - Quantum Weak Measurements and Applications: The last part of the seminar dealt with the modern field of quantum weak measurements. The talk was delivered by Dr. Prajit Chandran. The basics of classical measurement theory were first outlines. Then the peculiar aspects of quantum measurements were detailed. The mysterious nature of quantum world, and its opposition with common sense notions, were clearly explained and the wide disparity in the viewpoints classical and quantum theories were brought out.

4:45 PM to 5:15 PM: Valedictory session – The two day seminar concluded with the valedictory session. Feedback from the participants formed the most important part. The session concluded with the National Anthem.







Prayer



Welcome speech by Dr. Prasia P, Assistant Professor, Dept. of Physics, Govt. College, Chittur

GOVT. COLLEGE CHITTUR



Presidential address by Sri Vijayakrishnan M V, Assistant Professor &Head, Dept. of Physics, Govt. College, Chittur and also, the Coordinator of the seminar



Inauguration

Palakkad, Kerala Pin-678 104

PRINCIPAT GOVT, COLLEGE CHITTUR









Inauguration Ceremony

Palakkad, Kerala Pin-678 104





Inaugural address by Prof. Anand Viswanathan R, Principal, Govt. College, Chittur



Felicitation speech by Sri. Ramabadran C D, Assistant Professor, Dept. of Physics, Govt.

College, Chittur-678 104

PRINCIPAT GOVT, COLLEGE CHITTUR



Felicitation speech by Sri. Jagannadhan C, Assistant Professor, Dept. of Physical Education,



Felicitation speech by Sri.Shabir M B, U. U.C. Covt. College,

Palakkad, Kerala *
Pin-678 104

PRINCIPAT GOVT, COLLEGE CHITTUR

Chittur



