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St.Aloysius College , Edathua, Alappizha

Physik

ALOYSIAN PHYSICS NEWS LETTER

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Manager's Message

I am glad to know that Department of Physics is bringing out the Fourth edition of their news letter PHYSIK. It is a forum which could aptly be used for recording events, fond memories and creative writing.

I am sure that this will be informative and resourceful. With proud legacy of 38 years, the department has excelled in every field. Many students have brought louries in academic as well as cultural activities. Students educated from this department have carved a niche for themselves in various fields at national and international levels. On this occasion, I convey my good wishes to the faculty and students of the department in all their endeavours.

Rev.Fr. Mathew Chooravady

Message from HOD

An eventful and exiting college year has come to an end. The completion of a fully furnished DST-FIST Assisted Research Instrumentation Lab was a great achievement in this year for which we are truly grateful to College Manager Rev.Fr. Mathew Chooravady, Principal Dr. Jochan Joseph, and especially to College Bursar Rev. Fr. Biju Kannadippara who put greater efforts for its completion. It is with much pleasure and pride we present Physik-2020, 4th edition of our newsletter. The news letter describes the activities of the previous academic year, the contribution and aspiration of students and faculty members during the academic year 2019-2020.

I sincerely appreciate and want to thank and congratulate all the editorial board members especially Mrs. Rosmin John, and our teachers for the effort taken for the completion of Newsletter Physik -2020.

Prof. Lizymol Xavier



Principal's Message

I have great pleasure to know that the Department of Physics is publishing its fourth volume of annual news letter PHYSIK for the academic year 2019-2020.

The department of physics has the privilege of having a healthy, harmonious ambience and rich values which have played pivotal role in shaping the future of innumerable students. High standards and expectations for each student in regard to academic performance, cocurricular participation and responsible citizenship are the foundations of the department.

I take this opportunity to congratulate the staff and the students of the department for their marvellous achievements in curricular and co-curricular activities. I wish the department would continue its team work in the future as well which is indeed needed for promoting this research and Post Graduate department to more heights.

Dr.Jochan Joseph



Editor's Desk

It is with great pleasure that we bring you the 4th edition of Physik, an annual newsletter of department of Physics. The academic year 2019-20 was interesting and rewarding in many ways. The news letter highlights the

various activities and achievements of our students and faculty members during the past one year. This newsletter also throws lights on the facilities that the department provides. The intend of PHYSIK is to disseminate information about our department, and we hope that you find the issues informative and useful. We welcome suggestions and feedback that helps us to improve further.

Mrs. Rosmin John

IMPACT OF COVID -19 PANDEMIC ON HIGHER EDUCATION

The world today is facing the biggest public health risk which is leading to one of the largest and the quickest reorganization of the world order. By the end of March 2020, the epidemic had spread to over 185 countries and resulted in the closure of over 90 percent of all schools, colleges and universities impacting close to 1.38 billion students. The speed of the spread of the epidemic, the closure of higher education institutions and the transition to online teaching was so swift that it hardly gave any time to plan and to reflect on the potential risks or the potential opportunities that such a sudden change could bring.

Given such a situation it is important to look at the impact and reflect on what has transpired and what is likely to happen as we move forward in the field of global education.

SOME NEGATIVE IMPACTS OF COVID-19 ON EDUCATION

There are a number of areas of potential risks for global education.

Passive learning by students

The students shift to online learning without any planning - especially in countries like India where the backbone for online learning was not ready and the curriculum was not designed for such a format -- has created the risk of most of our students becoming passive learners and they seem to be losing interest due to low levels of attention span.

Added to this is that we may be leaving a large proportion of the student population untouched due to the digital divide that is part of many developing nations including India.

Unprepared teachers for online education

Online learning is a special kind of methodology and not all teachers are good at it or at least not all of them were ready for this sudden transition from face to face learning to online learning. There is a risk that in such a situation, learning outcomes may not be achieved and it may be only resulting in engaging the students.

Changing format of student recruitment

Universities and colleges worldwide are facing a major risk in the area of student recruitment and retention. The risk of losing students is so high that they will need to re-look at their admission practices, admission criteria and the overall recruitment process itself which will include, new methods of outreach and application process itself.

SOME POSITIVE CHANGES IN EDUCATION DUE TO COVID-19

Any change that is so disruptive is also likely to bring with it some new opportunities that will transform the higher education system worldwide and especially in a country like India which is planning to bring about a planned reform in this sector. Some of the key areas of opportunity are the following:

Rise in Blended Learning

Universities and colleges will shift to a model of blended learning where both face to face delivery along with an online model will become a norm. This will require all teachers to become more technology savvy and go through some training to bring themselves to the level that would be required.

New ways of delivery and assessments of learning outcomes will have to be adopted which opens immense opportunities for a major transformation in the area of curriculum development and pedagogy.

Learning management systems to be the new norm

A great opportunity will open up for those companies that have been developing and strengthening learning management systems for use by universities and colleges. This has the potential to grow at a very fast pace but will have to be priced appropriately for use by all institutions.

Improvement in learning material

There is a great opportunity for universities and colleges to start improving the quality of the learning material that is used in the teaching and learning process.

Since blended learning will be the new format of learning there will be a push to find new ways to design and deliver quality content especially due to the fact that the use of learning management systems will bring about more openness and transparency in academics.

Rise in collaborative work

There is a new opportunity where collaborative teaching and learning can take on new forms and can even be monetized. Faculty members/ teachers can deliver online courses to even students from competing institutions. Collaborations can also happen among faculty/teachers across the nation to benefit from each other.

Finally, it is expected that there will be a massive rise in teleconferencing opportunities which can also have a negative impact on the travel. A large number of academic meetings, seminars and conferences will move online and there is a possibility that some new form of an online conferencing platform will emerge as a business model. After all this, there is one certainty that we can envisage and that is going to change how higher education will operate globally and in India.

India is not just going through a reform in the higher education sector, but now it will go through a major transformation in general.

FACULTY CORNER

DR. JOCHAN JOSEPH



PRINCIPAL & ASSOCIATE PROFESSOR

SMT. LIZY MOL XAVIER



ASSOCIATE PROFESSOR & HOD

SMT. ROSMIN JOHN



ASSISTANT PROFESSOR

DR. LAKSHMI VIJAYAN



ASSISTANT PROFESSOR

DR. VINU T. VADAKEL



ASSISTANT PROFESSOR

SMT. RANI GEORGE



ASSISTANT PROFESSOR

MR. BABU K. THOMAS



ASSISTANT PROFESSOR

MS. INDU TREESA JOCHAN



GUEST FACULTY

MS. REVATHY G. NAIR



GUEST FACULTY



Mr. Johny Thomas
Lab Assistant



Mr. Tinu Joseph
Mechanic

ORIENTATION PROGRAMME

The activities of the Physics association during 2019-2020 were started with an orientation programme on 08-07-2019. Our former Vice Principal and HOD Physics Prof. James Sebastian gave an orientation class to all the students of our department and also for EEM students on the topic "MATHA PITHA GURU DAIVAM" under the auspicious of Senior Citizens forum, Edathua unit for which he is serving as the president.



PHYSICS ASSOCIATION INAGURATION

Activities of Physics Association for 2019-2020 academic year was officially inaugurated at 2.00pm on 27-08-2019 Tuesday at Fr.Punnappadom Hall by Dr. Ninan Sajeeth Philip, Rtd. HOD Physics, St. Thomas college Kozhencherry and Dean and Director of Artificial Intelligence Research and Intelligent systems, Thelliyoor.



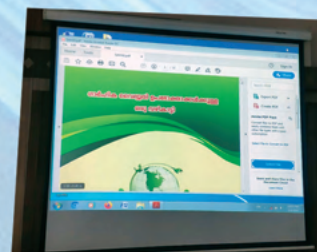
After inauguration Dr. Ninan gave an interesting lecture on 'Man and Space' depicting 'how space research help to improve normal human life and facilities'. Students's manuscript magazine 'TOE -2019' was published and 'Sahai- A guide to domestic electricity consumers, prepared by prof. Rosmin John was published.



PUBLISHING SAHAI- A GUIDE TO DOMESTIC ELECTRICITY CONSUMERS

'Sahai- A guide to domestic electricity consumers, a department publication prepared by prof. Rosmin John was published by Dr. Ninan Sajeeth Philip, Rtd. HOD Physics, St. Thomas college Kozhencherry and Dean and Director of Artificial Intelligence Research and Intelligent systems, Thelliyoor by giving a copy to Principal Dr. Jochan Joseph. The book comprises of

- Working principle and energy saving tips of various domestic electricity appliances
- Wattage of different appliances
- Electric energy consumption calculation method
- New Electricity Tariff rate of KSEB
- Importance of using renewable energy sources
- Different renewable energy based devices



FRESHERS DAY

Third and second year students of Physics department gave a warm welcome to their juniors – First year students with various cultural programmes and funny tasks.



TEACHERS DAY CELEBRATIONS

Teachers day was celebrated on 5th September 2019. Principal Dr. Jochan Joseph and all faculty members were present. Jochan sir lighted the candle and all teachers and students lighted their candles from it. Parvathy S Kumar [III DC physics] felicitated the teachers.



DEPARTMENT ONAM CELEBRATION

Department level onam celebration was on 5th September 2019. Principal Dr. Jochan Joseph gave onam message. HOD Prof. Lizymol Xavier felicitated. Various games for students and teachers were conducted. Lemon & spoon race, "sundarik pottu thodal" etc. Department won first prize for Athapookkalam and Maveli Mannan competition in the college onam celebration. Arathy Murali of IInd Msc won malayalee manka title.



OZONE DAY OBSERVATION

Ozone Day Celebrations 2019 sponsored by Kerala State Council for Science, Technology and Environment, Trivandrum was conducted on 18-19 September 2019.

Several competitions were included in the celebration like Pencil Drawing, Slogan Writing, Logo Designing and Photography Competition. These competitions motivate them to express their views and explore their creativity through their art works.



Slogan writing and Photography competitions were conducted online, in which students gave their work through mail or whatsapp and the other competitions were conducted in offline mode. Experts from the concerned field judged the competitions. Prof. Rani george coordinated the programme.

INDEPENDENCE DAY QUIZ

Department of physics conducted Independence Day quiz on 16th September 2019. It consisted of two rounds. Preliminary round contains 20 questions. Top 5 group were selected for the final round. Final round consisted of five rounds. The quiz master was Mr. Manoj Xavier, guest faculty of Dept. of commerce. Prof. Rani george coordinated the programme.



EUREKA -2020

HANDS ON EXPERIMENT WORKSHOP FOR HIGHER SECONDARY SCHOOL STUDENTS

To familiarise the students of class XI and XII with basic principles in physics through hands-on experience, the department of physics conducted a one-day workshop EUREKA -2020 on 29th November 2019. 22 students of Std XI and Std XII of St.Aloysius Higher Secondary School, Edathua participated in the workshop. After inauguration the five experiments were demonstrated using PPT presentation. All the 22 students were given experiment manual. After demonstration class they were led to UG physics lab. They were divided into 5 groups and did all the experiments and did all the calculations with the assistances of MSc students.

Best performers of each group were selected and were given a prize. At 4.00 pm the program came to an end. The workshop provided an opportunity for an in-depth understanding of basics of physics to improve the knowledge of students.



STUDY TOUR OF BSc STUDENTS

Study tour of VI semester degree students to Uduppi, Wayanad and Coorgu from 16th December 2019 to 20th December 2019. The journey started from college at 4.30pm on 16th December 2019 with 28 students. Prof. Babu K Thomas and Prof. Rosmin John accompanied the students.



CHRISTMAS DAY CELEBRATIONS

College conducted Christmas celebration on 20th December 2019. Chikku Sara Thomas(II MSc) won first prize in Angel competition. Sravan of Ist DC physics won 1st prize for Christmas father competition.



URJOLSAVAM AND PUBLIC AWARENESS SEMINAR ON ENERGY CONSERVATION AND PRESERVATION

In association with Energy management centre , Thiruvananthapuram, Department conducted an Energy fest-Urjolsavam for school students of Kuttanadu Educational District on 4th January 2020. Different competitions based on the theme of Energy conservation such as energy quiz, Pencil drawing , essay writing and slogan writing were conducted for students .



A public awareness seminar on 'Energy conservation and preservation' was given during the occasion. The seminar was taken by Prof. Rosmin John based on the content of 'Sahai'-a guide to domestic electricity consumers' a department publication. Students, teachers and parents of different schools of Kuttanadu Educational District was present. Around 100 people participated. Copy of Sahai was distributed among all the participants .



SEMINAR ON GLOBAL ENVIRONMENTAL POLLUTANTS

Department of Physics in association with Nature and Energy club of the college conducted an Invited talk on 09.01.2020 in the mini auditorium. Dr. Mahesh Mohan ,Assistant Professor, Dept. of Environmental Sciences ,M.G. University ,Kottayam gave an informative and interesting talk on Global environmental pollutants, Arctic, Antarctic expedition and future scope of studies in environmental science. About 100 PG&UG students participated. Dr. Lakshmi Vijayan coordinated the programme.



INDUSTRIAL VISIT TO Thumba Equatorial Rocket Launching Station and Priyadarshini Planetarium, Trivandrum

On 22nd January 2020, 81 students and 6 teachers of department visited Vikram Sarabhai Space Centre, Thumba and Priyadarshini Planetarium at Trivandrum. In VSSC at 11.45 am we had witnessed the launching of Sound Rocket RH(Rohini)200.



The ISRO currently uses RH-200, RH-300, RH-300 Mk-II and RH-560 Mk-II rockets, which are launched from the Thumba Equatorial Rocket Launching Station (TERLS) in Thumba and the Satish Dhawan Space Center in Sriharikota.

WORKSHOP ON COMMUNICATION BASICS AND A.M. RADIO MAKING

In order to enhance the scientific aptitude among students of our department we conducted a workshop on communication basics and Amplitude Modulated radio making on 4th January 2020. Mr. Justin John Assistant professor in physics of St. Berchman's college, Changanacherry was the resource person. After giving an interacting lecture on communication basics and the theory behind the working of a.m radio ,he divided the students into different groups. Each group were given necessary components and they prepared the capacitor using paper and aluminium foil. Inductor using PVC pipe and Cu wire. Each group were able to make AM radio. Students were thrilled when they heard the program of Aakashvani radio station Aroor, Alappuzha using the AM Radio kit they had prepared. About 60 PG and UG students, one former UG&PG student Sreejithmon S.G and 5 teachers were participated.

Department of Physics
St. Aloysius College, Edathua
Workshop on Communication Basics and AM Radio Making
 Resource Person:
Mr. Justin John, Amateur HAM Radio Operator VU2JJA
 Assistant Professor in Physics (S.B. College Changanacherry)
on 4th January 2020 (Saturday) at 10 a.m.



TALENT SEARCH EXAMINATION

TSE organised by Association of Physics Teachers (APT).was conducted on 11th January 2020 for graduate students Dr.Lakshmi Vijayan was the local coordinator . Thirty BSc. Students of our department participated



Rohini is a series of sounding rockets developed by the Indian Space Research Organisation (ISRO) for meteorological and atmospheric study. These sounding rockets are capable of carrying payloads of 2 to 200 kilograms (4.4 to 440.9 lb) between altitudes of 100 to 500 kilometres (62 to 311 mi).

After visiting the rocket launch we reached planetarium and entered in to the sky auditorium to watch the show on 'the story of planets'. then we visited the science museum there and had a first-hand experience of different interesting science experiments.



Prof.SABU JACOB MEMORIAL 7th ALL KERALA INTERCOLLEGIATE SCIENCE QUIZ COMPETITION

Prof. Sabu Jacob memorial 7th intercollegiate quiz competition was conducted on 24th January 2020. Dr. Tharanath R, Assistant professor of St. Aquinos college, Edacochin was the quiz master. 26 teams participated. After preliminary round 5 teams were selected for final round. Jibin Jayan & Sanjay Sabu and Manujith A & Albin P James of S.B College, Chanaganasherry got First prize and 2nd prize resp. Albin Saju & Varghese Reji of Baselius college Kottayam got 3rd prize.

1st prize winners were given Ever rolling Trophy, cash prize of Rs.3000/- and certificates. 2nd prize winners were given certificate and cash prize of Rs.1500/- and third prize winners got certificate and cash prize of Rs. 750/-.

TERMS AND CONDITIONS

- Registration fee Rs. 100/- per team
- Colleges can send teams consisting 3 students
- Participation fee included in registration
- Refund of cash at the time of registration
- Only questions will be based on Physics and Maths and not from general science

TIME SCHEDULE

- Registration: 08.00 a.m.
- Admission: 09.00 a.m.
- Final round: 10.00 a.m.
- Prize distribution: 11.00 a.m.

ST. ALOYSIUS' COLLEGE
 EASTERN ALAQUOIA
 DEPARTMENT OF PHYSICS
PROF. SABU JACOB MEMORIAL
7th ALL KERALA INTERCOLLEGIATE
SCIENCE QUIZ COMPETITION

On Friday, 24th January 2020
Venue : Fr. PUNPADAM HALL

Prof. Sabu Jacob
 "A lamp was never lighted without being kindled. It continues to burn in its own flame."



INAGURATION AND BLESSING OF DST-FIST ASSISTED ALOYSIAN INSTRUMENTATION CENTRE [AIC]

The Analytical Instruments Facility is assisted by DST- FIST programme. The instrumentation centre provides data collection facility to the research community in and around Edathua. Centre was blessed and inaugurated on 27th January 2020 by Rev. Fr. Mathew Chooravady, Manager and Rev. Fr. Biju Kannadippara, bursar of the College.

Instruments available in the centre:

I. UV-VISIBLE SPECTROPHOTOMETER – WITH DRS FACILITY

Make: ThermoFisher Scientific

Model: Evolution 220

Wavelength range: 190 to 1100 nm

Measurement mode: Diffuse and Specular reflectance

measurement, transmittance sample holder for powder, liquid and film as standard accessories.

II. SPECTROPHOTOMETER

Make: ThermoFisher Scientific

Model: GENESYS 140 μ Controller based Visible spectrophotometer with digital wavelength display.

Wavelength range: 325nm-1100nm

III. FOURIER TRANSFORM INFRA RED SPECTROPHOTOMETER

Make: Shimadzu

Model: IRSpirit

Spectral range : 7800cm⁻¹ to 350 cm⁻¹

IV. FOUR PROBE INSTRUMENT

Make: ADEC

PROBE 1 : DC RESISTIVITY

Specifications: Probe 1 to measure the DC conductivity of pellets and thin film



St. Aloysius College
 EASTERN ALAQUOIA
 Inauguration of Completed DST FIST Project
 And Blessing of Analytical Instruments Centre
 January 27th Monday 2.30pm

Inauguration

Dear Catholics,
 It is my great pleasure that the selected DST - FIST Analytical Instruments Centre was inaugurated in our college. It is one of the most important and useful facilities for the students, researchers and faculty of the Department of Physics. The inauguration of this centre is a great opportunity for the students and faculty to use the state-of-the-art instruments available in the centre.

The inauguration of this centre is a great opportunity for the students and faculty to use the state-of-the-art instruments available in the centre.

Rev. Fr. Mathew Chooravady, Manager
 Rev. Fr. Biju Kannadippara, Bursar

Programme

1. Inauguration of the centre
 2. Blessing of the centre
 3. Distribution of certificates to the students and faculty

Department Chair
 Prof. Lajayath Jayan (DST Project)
Principal
 Dr. Mathew Chooravady (DST Project)
Manager and Bursar
 Rev. Fr. Mathew Chooravady (DST Project)
Department Chair
 Dr. Biju Kannadippara (DST Project)
Department Chair
 Dr. Biju Kannadippara (DST Project)
Department Chair
 Dr. Biju Kannadippara (DST Project)

PROBE 2 : DC PROPERTY

a. V-I Characteristics of pellets

Specifications: Voltage sweep : +/- 30V & Current sensor : 50pA to 1Amp (auto ranging)

b. Seebeck & Thermoelectric voltage Measurement (palette)

Specifications: Voltage sensor : +/- 1μV to +/-30V

PROBE 3 : AC PROPERTY

a. AC CONDUCTIVITY

Specification: Frequency sweep: 20Hz to 10MHz & Measurement of parameters at every temperature step sweeping the frequency.

PROBE 4 : MAGNETIC PROPERTY STUDY

a. AC SUSCEPTIBILITY

Specification: Frequency of operation: 315Hz & Temperature range: Room Temperature to 600oC

b. PULSE FIELD HYSTERESIS STUDY

Specification: Maximum field strength up to 1Tesla

II. FLUORESCENCE SPECTROPHOTOMETER

Make: Agilent

Model: CARY ECLIPSE

III. SPECTROSCOPIC REFLECTROMETER

Make: Holmarc

Specification: Film thickness range: 25nm-3.5 μm

Spectrometer wavelength range: 340nm - 940nm



SPACE ON WHEELS-MOBILE SPACE EXHIBITION

Mobile space exhibition was organized by Department of Physics in collaboration with ISRO on 31st January 2020 from 9.00am to 4.00pm at college ground as a part of Vikram Sarabhai birth centenary celebration. A bus consisting of the models of different rockets of India and different space missions such as Chandrayaan, Mangalyaan and various satellites reached college ground at 8.15am.

Inaugural session was at 8.15am. Principal, Dr. Jochan Joseph inaugurated the function. Prof. Lizymol Xavier (HOD), vice principal Prof. Mathew Gregory, Jose J Vettiyil, HST, St. Aloysius HSS, Edathua were felicitated. After inauguration around 1000 students from various departments of our college and nearby schools visited the mobile exhibition. Mr. Mathew Tom, Scientist Engineer, VSSC, Thumba, and selected students of 1st Msc and II Dc batches gave narration of each model to the students. Ms. Indu Treasa Jochan was the coordinator of the programme.



DEPARTMENT ARTS FEST

On 10th February 2020 at 3.00pm we had conducted department arts festival and selected the best items for performing in college arts day celebration. College arts day was celebrated on 14th February 2020 in main auditorium. Students of physics department actively participated in the arts day celebrations. They presented group dances, classical dance and mono act for 30 minutes. Ms. Indu Treasa Jochan was the coordinator of the programme.



DIAMOND DUAL - 2020

Annual Physics Alumni get together- Diamond Dual – of the year 2019-2020 was conducted on 8th February 2020, 2 PM at Fr.Punnappadom Hall. More than 100 alumni were attended the function. The meeting honoured Retiring HOD Prof.Lizymol Xavier and principal Dr.Jochan Joseph for becoming the 1st alumni as the principal of St.Aloysius college,Edathua.Also honoured our alumni Dr.Anshitha Mayeen for securing Ph. D in Physics from MG university Kottayam and Msc toppers and BSc toppers of the year 2018-2019. Thae function was presided over by Vice president Mr. Mathew Devasia.The meeting was blessed with the presence of Prof.James Sebastian, Prof. P. A. Annamma, Prof.Kochurani Michael, Dr.Varghese Mathew and Dr.K.C.Mathai - former teachers of our department. Meeting entrusted Mr. Manikanthan Nair T. M. as President, Dr.Lakshmi Vijayan as secretary and other elected members to lead the Association more effectively in comming years.



DR.VARGHESE MATHEW ENDOWMENT ELOCUTION COMPETITION

Department conducted Dr.Varghese Mathew Endowment Elocution Competition to find the best orator of the department on 27/2/2020,11.00 am at smart room. Parvathy S Kumar of Illrd Bsc Physics and Jasmine Mathew of IInd Msc won first and second prizes respectively.



SPORTS DAY

College sports day was on 28th February 2020 from 10.00am to 12.30 pm. Department secured 5th position in sports with 126 points. we got second prize in marchpast. Students actively participated in all sports events.



STUDENT MANUSCRIPT MAGAZINE -'OOZHAM -2020

Students Manuscript magazine 'OOZHAM-2020' was released on 2nd March 2020. Dr.Jayapal R., Associate Professor,D.B.College,Thalayolaparampu released the magazine by giving it to Principal Dr. Jochan Joseph. Prof. Rosmin John was the staff Editor and Abhinav V., Archabhai U.R and Najiya N. of III BSc. were the student editors.



PHYSICS ASSOCIATION VALEDICTORY FUNCTION AND FAREWELL TO PROF. LIZY MOL XAVIER AND FINAL YEAR STUDENTS

Physics Association Valedictory Function and Farewell to Prof. Lizymol Xavier and Final Year Students was conducted on 2/3/2020 at 10.30 am in Fr.Punnappadom Hall .Dr. Jayapal R. ,Associate Professor, D.B. College , Thalayolaparampu was the chief guest. Prof. Lizymol Xavier , Dr. Jayapal R and Students who secured high positions in various intercollegiate , intra collegiate and department level competitions in arts , sports , quiz and literary competitions were honoured with gifts . Physics association secretary Hamna N. presented the report of association activities of the academic year 2019-2020.



Aloysian Exemplar – 2020

The best outgoing students of St.Aloysius College during the academic year 2019-2020 was determined by a contest – 'Aloysian Exemplar'. Among the five students who won the Exemplar competition , Alphamol Sebastian and Jasmine Mathew are from our Physics family.



Jasmine Mathew



Alphamol Sebastian

Aloysian Exemplars from the Dept. of Physics

Achievements of students

MG University Youth Festival
A grade in English Poetry Writing



NIKITHA SAIRA ALEX

MG University Youth Festival
A grade in Kuchipudi



VINAYA P

MG University Intercollegiate Water Polo and Swimming Competition winner



HARI KRISHNAN G
II B.Sc.

Third Prize in All Kerala Intercollegiate Science Quiz Competition held at St.Xaviers College, Vaikom



Anupama Sanal
II MSc.



Alphamol Sebastian
II MSc.

Second prize in Photography Competition conducted by S,B College, Changanacherry



Agus Mathew
II B.Sc.

Congratulations...

Second prize for campus literary quiz in Mathrubhumi International Festival of Letters MBIFL – 20



Sruthy S
I B.Sc



P.Arundhati Nair
I B.Sc

Prof.P.V. Joseph memorial All Kerala Intercollegiate Literary Quiz competition organised by Dept. of English, St.Aloysius College , Edathua



Alphamol Sebastian
II MSc.
Second Prize



Brigit Jose
II MSc.
Third Prize



Jasmine Mathew
II MSc.
Third Prize

Dr.Varghese Mathew Endowment Elocution Competition-Best orator



Parvathy S. Kumar
First Prize
III B.Sc

Mavelimannan and Christmas Father competition



Sravan S
First Prize
I B.Sc

Congratulations..... B.SC. PHYSICS 2017-2020 BATCH RESULT

Even in the midst of natural calamities like heavy flood 2018 and in the fearful situation created by pandemic Covid -19, our students secured good results in M.G University examinations



HAMNA N
A+ - 9.3



G KIRAN
A -8.46



PARVATHY.V
A- 8.36



SONA SUNNY
A-8.17



DHANYA S KUMAR
A -8.13



JOEL JOHN
A -7.88



AARCHABHAI U R
A -7.76

THE NOBEL PRIZE IN PHYSICS 2019

The Nobel Prize in Physics 2019 was awarded "for contributions to our understanding of the evolution of the universe and Earth's place in the cosmos" with one half to James Peebles "for theoretical discoveries in physical cosmology", the other half jointly to Michel Mayor and Didier Queloz "for the discovery of an exoplanet orbiting a solar-type star" outside our solar system.



James Peebles Michel Mayor Didier Queloz

James Peebles' insights into physical cosmology have enriched the entire field of research and laid a foundation for the transformation of cosmology over the last fifty years, from speculation to science. His theoretical framework, developed since the mid-1960s, is the basis of our contemporary ideas about the universe.

The Big Bang model describes the universe from its very first moments, almost 14 billion years ago, when it was extremely hot and dense. Since then, the universe has been expanding, becoming larger and colder. Barely 400,000 years after the Big Bang, the universe became transparent and light rays were able to travel through space. Even today, this ancient radiation is all around us and, coded into it, many of the universe's secrets are hiding. Using his theoretical tools and calculations, James Peebles was able to interpret these traces from the infancy of the universe and discover new physical processes.

The results showed us a universe in which just five per cent of its content is known, the matter which constitutes stars, planets, trees – and us. The rest, 95 per cent, is unknown dark matter and dark energy. This is a mystery and a challenge to modern physics.

In October 1995, Michel **Mayor and Didier Queloz** announced the first discovery of a planet outside our solar system, an exoplanet, orbiting a solar-type star in our home galaxy, the Milky Way. At the Haute-Provence Observatory in southern France, using custom-made instruments, they were able to see planet 51 Pegasi b, a gaseous ball comparable with the solar system's biggest gas giant, Jupiter.

This discovery started a revolution in astronomy and over 4,000 exoplanets have since been found in the Milky Way. Strange new worlds are still being discovered, with an incredible wealth of sizes, forms and orbits. They challenge our preconceived ideas about planetary systems and are forcing scientists to revise their theories of the physical processes behind the origins of planets. With numerous projects planned to start searching for exoplanets, we may eventually find an answer to the eternal question of whether other life is out there.

This year's Laureates have transformed our ideas about the cosmos. While James Peebles' theoretical discoveries contributed to our understanding of how the universe evolved after the Big Bang, Michel Mayor and Didier Queloz explored our cosmic neighbourhoods on the hunt for unknown planets. Their discoveries have forever changed our conceptions of the world.



Congratulations.....

Heartful congratulations to
Dr. Jochan Joseph, our alumni, faculty member and
former HoD to become
the Principal of St. Aloysius College, Edathua

Farewell.....

After 26 years of meritorious career with enormous accomplishments and influence, Prof. Lizymol Xavier, Head, Department of Physics retired from service on 31st May 2020.

Dear Teacher , even though you are retiring, the values and knowledge that you have imparted to your students and colleagues will never retire. The entire Aloysian Physics family is grateful to you and extend all the best in the next phase of your life!



OUTGOING STUDENTS

ST. ALOYSIUS COLLEGE EDATHUA
B.S.c. Physics 2017-2020 BATCH



ST. ALOYSIUS COLLEGE EDATHUA
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