

PROFORMA OF EVENTS

1. Name of Department-**PHYSICS**
2. Event-**Webinar**
3. Date-**20.10.2020**
4. Title of the Topic-**FUNDAMENTAL CONSTITUENTS OF MATTER**
5. Name & Designation of Resource Person:-

Dr. Bibekananda Nayak
Asst. Professor of Ballistic & Applied Physics
F.M University Balasore, Odisha.

6. **Report-:** Matter is any substance that has mass and takes up space by having volume. All everyday objects that can be touched are ultimately composed of atoms, which are made up of interacting subatomic particles, and in everyday as well as scientific usage, "matter" generally includes atoms and anything made up of them, and any particles (or combination of particles) that act as if they have both rest mass and volume. However it does not include massless particles such as photons, or other energy phenomena or waves such as light. Matter exists in various states (also known as phases). These include classical everyday phases such as solid, liquid, and gas—for example water exists as ice, liquid water, and gaseous steam—but other states are possible, including plasma, Bose–Einstein condensates, fermionic condensates, and quark–gluon plasma.

Usually atoms can be imagined as a nucleus of protons and neutrons, and a surrounding "cloud" of orbiting electrons which "take up space". However this is only somewhat correct, because subatomic particles and their properties are governed by their quantum nature, which means they do not act as everyday objects appear to act – they can act like waves as well as particles and they do not have well-defined sizes or positions. In the standard model of particle physics, matter is not a fundamental concept because the elementary constituents of atoms are quantum entities which do not have an inherent "size" or "volume" in any everyday sense of the word. Due to the exclusion principle and other fundamental interactions, some "point particles" known as fermions (quarks, leptons), and many

composites and atoms, are effectively forced to keep a distance from other particles under everyday conditions; this creates the property of matter which appears to us as matter taking up space.

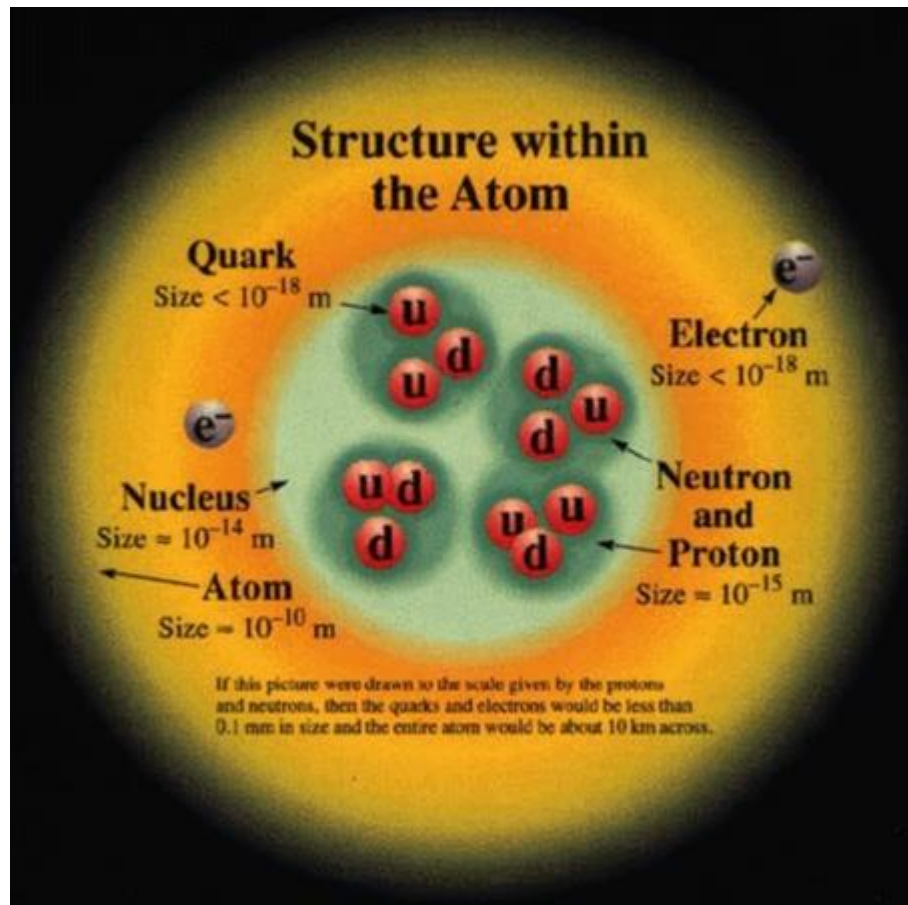


Fig.1 structure within the atom.

7. Other Remark-The webinar on topic “**Fundamental Constituents of Matter**” was presided by the honorable principal Prof. Ranjit Ranjan Sahoo with IQAC coordinator Dr. Mathuri Charan Nayak. The welcome address of the resource person was given by the convener (HOD of Physics) Mr. Brahmananda Sethi. The invited resource person discussed the topic from various angles, so that it will be fruitful to UG & PG students as well as for research scholars those who are working in this field. The interactive session for the participant with the resource person was very nice. At the end of webinar vote of thanks was given by Co-convener Miss Diptimayee Routray. Other staff members of physics department gave their efforts to make the webinar a grand success.

WEBINAR ON

Fundamental Constituents of Matter

20th October 2020 Tuesday, Time: 11:30 am to 12:30 pm

Patron



Prof. Ranjit R. Sahoo, Principal

Convener



Mr. Brahmananda Sethi
HOD Dept. of Physics

Venue: Google Meet



Organised by
Department of Physics in
Association with IQAC
Tulasi Women's College
Kendrapara

Resource Person



Dr. Bibekananda Nayak
Asst. prof. of Physics
F.M University Balasore

Co-Convener



Miss. Diptimayee Routray
Lecturer in Physics

Regd. Link: <https://forms.gle/cYpQCEkCy5tevw6u6>
E-Certificate will be provided to each participant



meet.google.com/grb-ihkk-aoj?authuser=0

ଓ ଘରଢିଅ ତାଙ୍କ ନାମରେ କରିଦେବାକୁ ବାଧ୍ୟ

ତୁଳସୀ ମହିଳା ମହାବିଦ୍ୟାଳୟରେ ୱେବିନାର୍

କେନ୍ଦ୍ରାପଡ଼ା, ୨୧/୧୦(ଇମିସ): ତୁଳସୀ ମହିଳା ମହାବିଦ୍ୟାଳୟର ପଦାର୍ଥ ବିଜ୍ଞାନ ବିଭାଗ ତରଫରୁ ଅଧ୍ୟକ୍ଷ ପ୍ରଫେସର୍ ରଞ୍ଜିତ୍ ରଞ୍ଜନ ସାହୁଙ୍କ ପୌରୋହିତ୍ୟରେ ଆଜି ଏକ ୱେବିନାର୍ ଅନୁଷ୍ଠିତ ହୋଇଛି। ଏହାକୁ ବିଭାଗୀୟ ମୁଖ୍ୟ ଅଧ୍ୟାପକ ଶ୍ରୀ ବ୍ରହ୍ମାନନ୍ଦ ସେଠୀ ସଂଚାଳନ କରିଥିଲେ। +୩ ଦ୍ଵିତୀୟ ବର୍ଷୀୟ ଛାତ୍ରୀ ରୋଜାଲିନ୍ ନାୟକ ସ୍ଵାଗତ ଭାଷଣ ଦେଇଥିଲେ। ଫକୀରମୋହନ ବିଶ୍ଵବିଦ୍ୟାଳୟର ପ୍ରାୟୋଗିକ ପଦାର୍ଥ ବିଜ୍ଞାନ ଓ କ୍ଷେପଣାସ୍ତ୍ର ବିଦ୍ୟା ବିଭାଗର ସହଯୋଗୀ ପ୍ରଫେସର୍

ଡ. ବିବେକାନନ୍ଦ ନାୟକ ମୁଖ୍ୟ ଆଲୋଚକଭାବେ ଯୋଗଦେଇ ବିଷୟବସ୍ତୁ ଉପରେ ଅଭିଭାଷଣ ରଖିଥିଲେ। ମହାବିଦ୍ୟାଳୟର ଆଇ.କ୍ୟୁ.ଏ.ସି ର ସଂଯୋଜକ ଡ. ମଥୁରୀ ଚରଣ ନାୟକ ଓ ଅଧ୍ୟାପକ ନିତ୍ୟସୁନ୍ଦର ମାନିକ ଏହି ୱେବିନାର୍ ପରିଚାଳନା କରିଥିଲେ। ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ମହାବିଦ୍ୟାଳୟ ସହିତ ଅନ୍ୟାନ୍ୟ ମହାବିଦ୍ୟାଳୟର ସଂଖ୍ୟାଧିକ ଅଧ୍ୟାପକ, ଅଧ୍ୟାପିକା ଓ ଛାତ୍ରଛାତ୍ରୀ ଅଂଶଗ୍ରହଣ କରିଥିଲେ। ଅଧ୍ୟାପିକା ଦିପ୍ତୀମୟୀ ରାଉତରାୟ ଧନ୍ୟବାଦ ଅର୍ପଣ କରିଥିଲେ।

WEBINAR ON

" FUNDAMENTAL CONSTITUENTS OF MATTER "

Organized by

Department of Physics in Association with Internal Quality Assurance cell (IQAC), Tulasi Women's College, Kendrapara on 20th October, 2020

Certificate of Participation

This is to certify that Dr/Mr/ Mrs/Miss *Nibedita Nayak* of *Tulasi Women's College, Kendrapara* has participated in the Webinar organized by Department of Physics in Association with Internal Quality Assurance Cell (IQAC), Tulasi Women's College, Kendrapara on 20th October, 2020.

Patron
Prof. Ranjit Ranjan Sahoo
Principal, Tulasi Women's College,
Kendrapara

Dr. Mathuri Charan Nayak
Co-ordinator (IQAC),
Tulasi Women's College,
Kendrapara

Convener
Mr. Brahmananda Sethi
HOD, Physics
Tulasi Women's College, Kendrapara

BrahmanandaSethi
(HOD).of Physics.

