National conference on " Knot Theory and Related Topics"
Organised by the Department of Mathematics
DCT's Dhempe College of Arts and Science
on 23rd –24th February 2018.

DCT's Dhempe College of Arts and Science is a premier Institute in Goa , accredited at 'A' Grade by NAAC and ISO 9001:2008 certified.
The Department of Mathematics was set up at the inception of the College in 1962 having distinguished alumni placed at high positions in India and abroad. The department offers 6 units BSc Course in Mathematics.

Aims and Objectives of the Conference:

Knot theory is a subfield of an area of Mathematics, which is topology. Topology is the study of the properties of geometric objects that are preserved under deformation. Knot theory, in essence, is the study of the geometrical aspects of shapes. It is a branch of geometry of 3 dimensions and is extremely important in the study of 3 – dimensional topology. It is an ultimate purpose of knot theory to classify a topological difference of Knot phenomena in mathematics and in science.
Knot theory has found real world application in non – mathematical fields. It has moved from the realm of topology to mathematical physics and in certain areas of mathematical biology and chemistry.
The conference is intended to explain the Knot theory and its application. It aims to provide a platform to learn Knot theory with expertise in this field, to give exposure to the faculty and research scholars to Knot theory and its applications.

The topics to be covered in the conference are :

1. Knot and 3-manifolds
2. Knot Diagramatics
3. Knot Homologies
4. Mapping class groups of double torus knots
5. Knots and Braid

6. Knots and Hyperbolic Geometry
7. Knot Invariants(focus on unknotting operations)
8. Virtual Knot Invariants (polynomial invariants and numerical invariants)

Resource Persons :

First Day (23rd Feb 2018) : Dr. Rama Mishra (IISER Pune)
Dr. A.J. Jayanthan, Goa University
Dr. Lucas Miranda, Khandola College, Goa

Second Day (24th Feb 2018) : Dr. Madeity Prabhakar, IIT Ropar
Dr.Shree Krishna, IIT Guwahati

Schedule :

Timing	**23/02/2018**	**Timing**	**24/02/2018**
8.30 am- 9.30 am	Registration	9am – 10 .15am	Session 5: Knots and Braid by Dr. Shree Krishna
9.30 am – 10.00 am	Inauguration	10.15am – 10.30am	Tea break
10 am – 11.15 am	Session 1 :Knot Diagramatics by Dr Rama Mishra	10.30am – 11.45	Session6: Knots and Hyperbolic Geometry by Dr. Shree Krishna
11.15am – 11.30 am	Tea break	12- 1.15 pm	Session 7: Knot Invariants(focus on unknotting operations)by Dr. M. Prabhakar
11.30am – 12.45 pm	Session 2: Knot Homologies by Dr. Rama Mishra	1.15pm – 2pm	Lunch break
12. 45 am – 2pm	Lunch break	2pm – 3.15 pm	Session 8: Virtual Knot Invariants (polynomial invariants and

			numerical invariants)by Dr. M. Prabhakar
2pm – 3.15 pm	Session 3: Knots and 3- Manifolds by Dr. A.J.Jayanthan	3-15pm – 3.30 pm	Tea break
3-15pm – 3.30 pm	Tea break	3.30pm – 4.45 pm	Participants session , feed back
3.30pm – 4.45 pm	Session 4: Mapping class groups of double torus knots By Dr. Lucas Miranda	4.45pm – 5.15pm	Valedictory

Eligibility: Faculty members, research scholars and post graduate students of Mathematics from educational Institutions (Colleges and Universities)
Kindly communicate your participation on or before **8th February** 2018.
For registration, click on this hyperlink
https://goo.gl/forms/p8e9T9SHuowj7Rf42.
Mobile : +918411030366 .

Patron: Mr. Srinivas Dempo
Mrs. Pallavi Dempo
Mr. Yatish Dempo

Advisory Committee:
Mr Rajesh Bhatikar(Administrator, Dempo Charities Trust's Institutions)
Dr A.J.Jayanthan(Professor in the department of Mathematics ,Goa University)

Organising Committee:

Convenor : Dr. Vrinda Borker (Principal)
Co-Convenor : Mrs. Manjiri Barve (Vice Principal)
Coordinator : Mrs. Maria Suzana Miranda
Secretary: Mr.Vitendra Mhatonkar
Treasurer: Mrs. Suchana Amonkar

Registration Fees:

Rs 1500 by RTGS , CANARA BANK, Panaji Main Branch, Mathais Plaza, 18th June Road. Panaji, Goa -403001. IFSC Code CNRB0000308, MICR code 403015002, Bank Account Number : 0308101041640.
Conference Kit, tea with snacks and lunch will be provided to the participants .
Note: The outstation participants will have to arrange for their own lodging. However a list of budget hotels near the college can be provided to the interested participants on request