

**St. Philomena's College (Autonomous),
Bannimantap, Mysuru - 15.**

PG Department of Mathematics

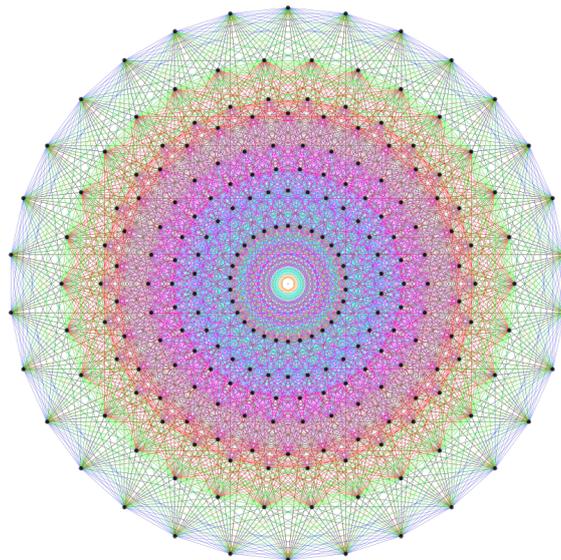


A Report On Special Lecture held during 29-06-2022

Special talk on Lie Algebra and Lie group Bundles

**Resource Person: Prof. B. S. Kiranagi.
Adjunct Professor,
Mangalagangothri,
Mangalore University, 574199.**

Venue: Room number 79, PG Block.



Objectives

Introducing Lie Algebra and Lie-Bundle Groups on the basis of Matrix and Group Theory and its application to Interdisciplinary subjects.

Outlines of the Session:

- Definition and Illustration on matrix lie group with examples and properties.
- Unique properties on Special Linear Groups.
- Manifold theory and differentiable structures.
- Discussing few results on Lie group Bundles.
- Introduction to Noetherian and Zariski Topology.
- Demonstration of Lie Algebra.



The Department of Mathematics, conducted a guest lecture in Lie Algebra and Lie group Bundles, on 29th, June 2022. The resource person, Prof. B. S. Kiranagi is an Adjunct professor at Mangalore University, who is also an active researcher in the field of Lie Group Bundles and Lie Algebra. Mr. Bharatha K, Assistant professor of PG Department of Mathematics, address the gathering and introduce the speaker. The lecture series began soon, after welcoming the speaker.

The speaker began his talk starting with few definitions of Matrix lie groups with some examples, continuing with special linear groups and its properties, which

includes special orthogonal, unitary and manifolds. Moving on the speaker explained about differentiable structures of lie groups by stating some important results, namely the Fundamental theorem of algebra and Hilbert basis theorem. Further the speaker gave an overview about Noetherian and Zariski Topology which amazed the students.



The speaker walked the student through a series of slides that help them to understand the basics of Lie group bundles and Lie algebra. The session was very interactive and ended with many students requesting for more session.