

GLIMPSES INTO MATHEMATICS

KERALA SCHOOL OF MATHEMATICS

A joint venture of DAE, Govt. of India and KSCSTE, Govt. of Kerala

July 1 2024 - July 13 2024

Glimpses into Mathematics is a series of programs at Kerala School of Mathematics for providing opportunity to students at the MSc level to have a look into advanced topics in mathematics and familiarize themselves with research topics. These lectures are given by experts in various areas spanning a duration of one to two weeks.

The first in this series is by Prof. N. S. N. Sastry on Group Representations, from 1st to 13th July 2024. Groups are realized as symmetries of objects such as sets, vector spaces, field extensions, geometric and combinatorial objects. In fact, they mostly occur as realizations and hence their ubiquity and utility. The earliest study of such representation was on sets (permutation groups), and the representation as vector space isomorphisms (Linear representations).

Selection Process

The selection will be based on your scores in your previous degree program, and on the recommendation letter sent by the head of the department of the applicant's current institution. Only those applications received through the online form mentioned below will be considered. Selected candidates will be informed through email.

Course: Linear Representations of Finite Groups

Instructor: N.S. Narasimha Sastry

Topics: Definition of linear representation of a group, many examples, sums and products of representations, irreducible and indecomposable representations, Maschke's theorem, Schur's lemma, character of a representation, orthogonality relations. Induced representations and Frobenius reciprocity may also be covered.

Background required: Those who have a good background in Group theory (M.Sc. first year level minimum) and linear algebra, will be able to follow these lectures. PhD Scholars and young faculty members are also eligible to apply.

Application Procedure

Fill out the application form at the following link:
<https://forms.gle/bxTdmxXKBUJTpdWg7>

Deadline

The last date for receiving applications is by **5 PM, June 21, 2024**

For further details, please write to glimpsesintomathematics@ksom.res.in

CLICK HERE TO APPLY

