JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

(Established by H.P. State Legislature vide Act No. 14 of 2002)

DEPARTMENT OF MATHEMATICS

Alumni Talk (8 September 2023) Report

The Department of Mathematics, JUIT, and JUIT alumni Cell jointly organized an alumni talk on "An Overview of Research in Algebraic Coding Theory" in online mode on 8th September 2023 (12:15 pm-01:15 pm).

The talk was delivered by Dr. Meenakshi Devi, alumna Department of Mathematics JUIT. She is working as a Senior Lecturer in the Department of Mathematical Sciences at Sol Plaatje University (SPU), South Africa. In this talk the speaker outlined the Research fundamentals and importance of the Algebraic Coding Theory. The talk was attended by about 32 participants including research scholars, faculty members, and students.

Department of Mathematics HoD Prof. Dr. Rakesh Kumar Bajaj also shared his valuable thoughts in the event. The event was coordinated by Mathematics Alumni (Faculty) Coordinator Dr. Pradeep Kumar Pandey, Department of Mathematics, Jaypee University of Information Technology, Solan.

09/09/2023

Dr. Pradeep Kumar Pandey
Event Coordinator
Department Alumni Coordinator

09/09/2023

Dr. Saurabh Bansal
Alumni Cell in-charge
JUIT

9/9/2023

Prof. Rakesh Kumar Bajaj
HoD Mathematics
JUIT

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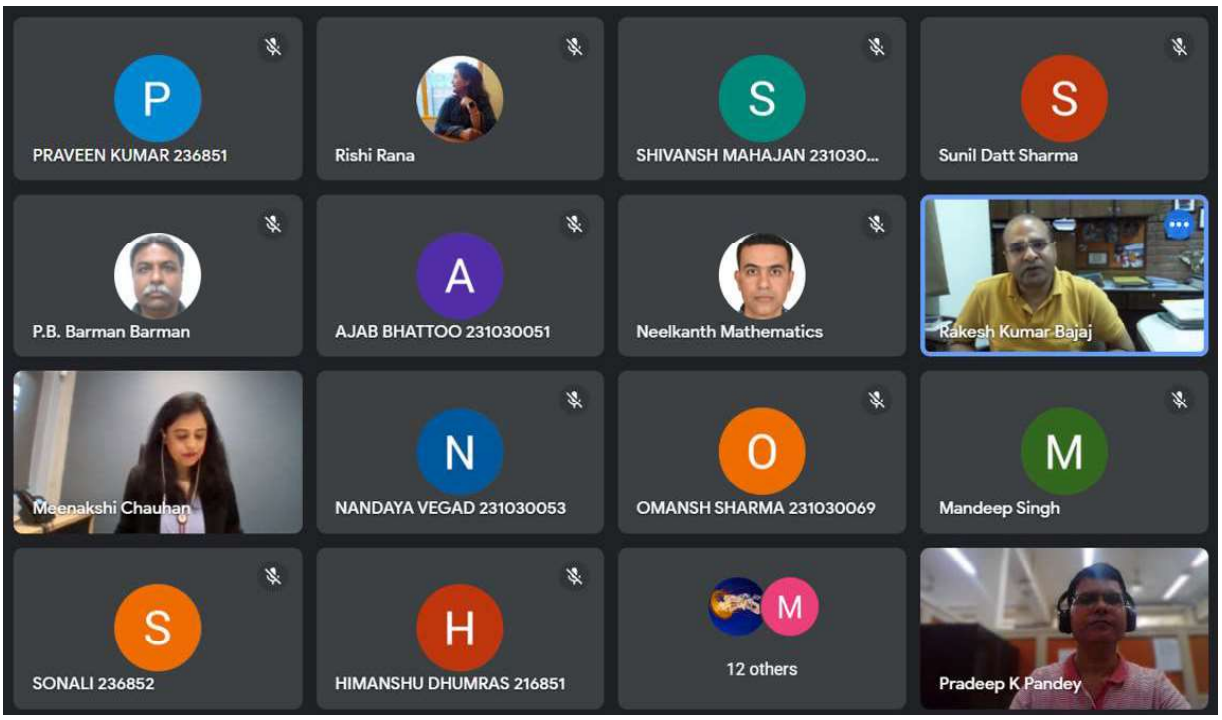
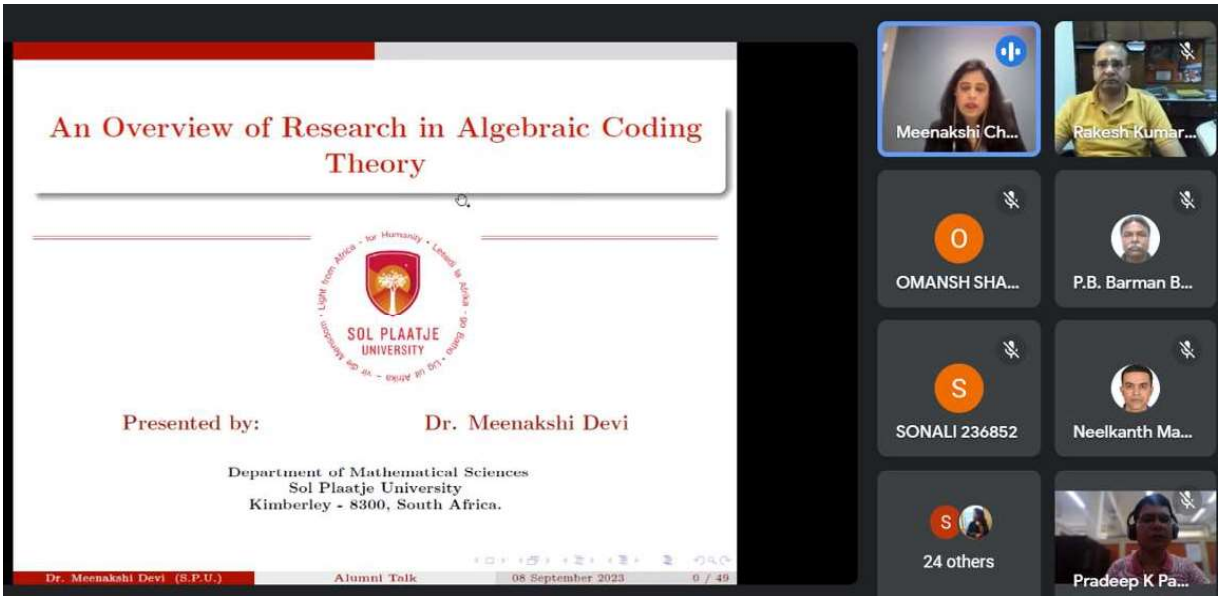
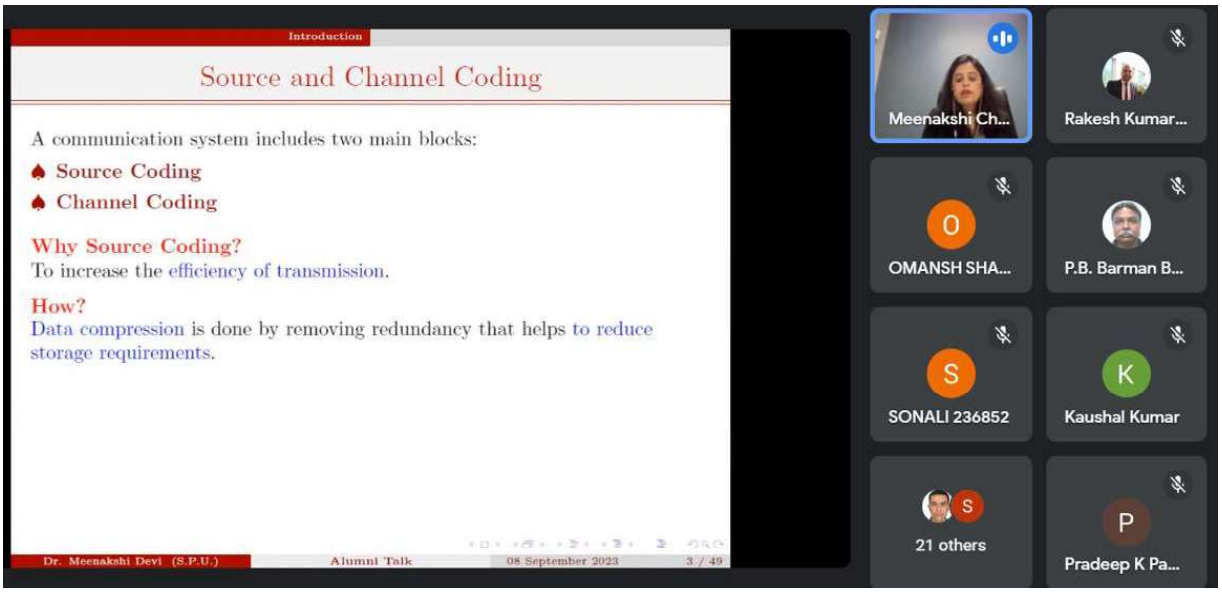
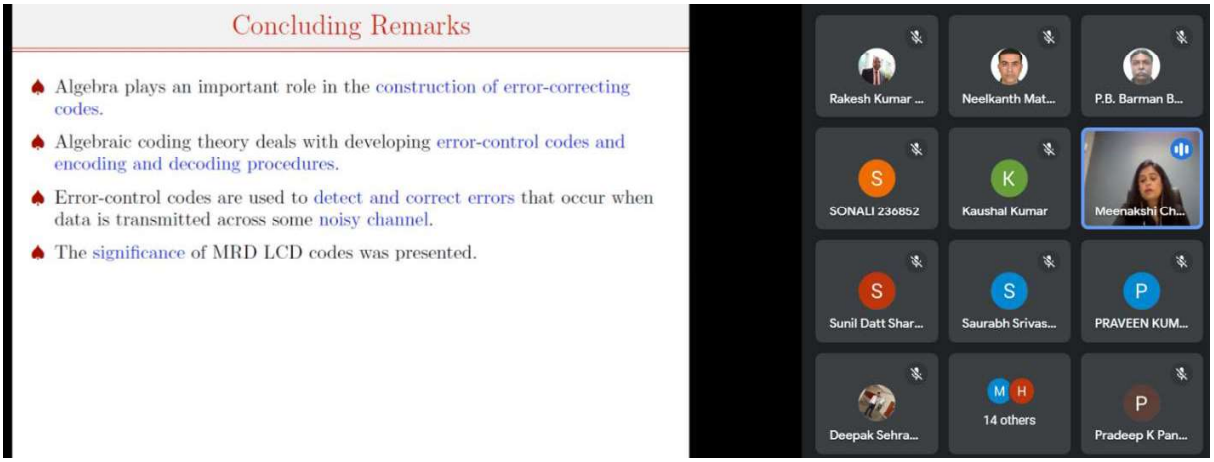





Introduction
Source and Channel Coding
A communication system includes two main blocks:
Source Coding
Channel Coding
Why Source Coding?
To increase the efficiency of transmission.
How?
Data compression is done by removing redundancy that helps to reduce storage requirements.
Dr. Meenakshi Devi (S.P.U.)
Alumni Talk
08 September 2023
3 / 49
Meenakshi Ch...
Rakesh Kumar...
OMANSH SHA...
P.B. Barman B...
SONALI 236852
Kaushal Kumar
21 others
Pradeep K Pa...


Concluding Remarks
Algebra plays an important role in the construction of error-correcting codes.
Algebraic coding theory deals with developing error-control codes and encoding and decoding procedures.
Error-control codes are used to detect and correct errors that occur when data is transmitted across some noisy channel.
The significance of MRD LCD codes was presented.
Rakesh Kumar ...
Neelkanth Mat...
P.B. Barman B...
SONALI 236852
Kaushal Kumar
Meenakshi Ch...
Sunil Datt Shar...
Saurabh Srivas...
PRAVEEN KUM...
Deepak Sehra...
14 others
Pradeep K Pan...

WEBINAR

AN OVERVIEW OF RESEARCH IN ALGEBRAIC CODING THEORY (ALUMNI TALK)

FRIDAY

08 September 2023

TIME

12.15-01. 15PM

SPEAKER

Dr. Meenakshi Devi

Department of Mathematical Sciences
Sol Plaatje University
South Africa.

SCAN ME

ORGANIZED BY

Department of Mathematics, JUIT, Waknaghat, Solan, H.P.

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JUIT Alumni Cell