

# TECHNICAL PROGRAMME SCHEDULE

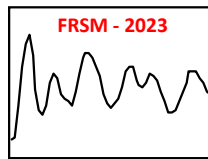
International Symposium

on

27th

## FRONTIERS OF RESEARCH IN SPEECH AND MUSIC

(FRSM-2023)



August 4-5, 2023



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**Common Google Meet Link for Workshops Keynote Talks &  
Cultural Program**

<https://meet.google.com/kwz-tsih-obq>

<b>Google Meet Link for Contributory Parallel Session <b>A</b></b>	<b>Google Meet Link for Contributory Parallel Session <b>B</b></b>
<a href="https://meet.google.com/uiv-jhdn-kcg">https://meet.google.com/uiv-jhdn-kcg</a>	<a href="https://meet.google.com/sgz-ecqq-dxu">https://meet.google.com/sgz-ecqq-dxu</a>

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**FRIDAY (DAY 1)** **AUGUST 4, 2023**  
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**REGISTRATION** **08:00 - 09:00**

**INAUGURAL SESSION** **09:00 - 10:00**

**Invocation and Welcome Address** **09:00 - 09:10**

**About FRSM:** Dr. Shankha Sanyal, Program Chair, FRSM-2023 **09:10 - 09:20**

**Inaugural Address:** Prof. S.S. Agrawal, Honorary Chair, FRSM -2023 **09:20 - 09:30**

**Address of the Chief Guest :** **09:30 - 09:45**

**Address by Director, SVNIT, Surat** **09:45 - 09:55**

**National Anthem** **2 Minute**

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**High Tea** **TIME: 10: 00– 10:15 IST**

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**Session Chair:****Keynote Lecture 1:** Prof. Vinod Vidhwans, Flame University, Pune

The Generative Theory of Indian Music (GTIM): A Computational Paradigm for Indian AI Music

**Day 1: Session 2: Contributory Session 2****TIME 11:15 - 12:15 IST ---****Track: Music**

Session Chair:-

Google Meet Link:-

<b>Serial No.</b>	<b>Paper ID</b>	<b>Authors and Affiliation</b>	<b>Title of the Paper</b>
1	13	C Lalnun Hlui (ICFAI University)*	An Ethnomusicological study of Darpawngi's Mizo folk songs: A Cantometric Experiment
2	2	Yoshita Sharma (All India Institute of Speech and Hearing)*; Harshada Mali (All India Institute of Speech and Hearing); K.V. NISHA (All india institute of speech and hearing, mysore)	DOES SELF-PERCEIVED MUSICAL COMPETENCE CONFER DIFFERENTIAL BENEFITS ON AUDITORY PROCESSING ABILITIES IN INSTRUMENTALISTS?
3 (Virtual)	33	Bommisetty Hema Mallika,Junmoni Borgohain, Archi Banerjee, Priyadarshi Patnaik (IIT Kharagpur)	Music-Evoked Emotion Classification from EEG: An Image Based CNN Approach
4	19	Bhumika D (Jss institute of speech and hearing )*; Bhumika D (Jss institute of speech and hearing ) <b>(not registered yet)</b>	Simple working memory in children with music and dance training.

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**Track: Speech**
**Session Chair:-**
**Google Meet Link:-**

Serial No.	Paper ID	Authors and Affiliation	Title of the Paper
1	3	Pooja Jain (Indian Institute of Information Technology, Nagpur)*; Ankit Barai (Indian Institute of Information Technology, Nagpur)	Detecting Toxic speech using BERT and Deep Learning
2	6	Rahul Dev Verma; Mahesh Chandra Govil; pankaj kumar keserwani (NIT Sikkim) <b>(not registered yet)</b>	A Deep learning approach for BGP security Improvement
3	8	siba prasad mishra (SVNIT surat)*; Pankaj C Warule (SVNIT Surat); Dr. Suman Deb (NIT Surat)	Speech Emotion Classification Using Deep Learning
4	28	Atul Rautray; Shreya G Abhyankar)*; Bhuvan Hawargi); Josh Maitra); Ms. Ashwini (PES University) <b>(not registered yet)</b>	Parametric Analysis of Audio Effects on Vocal and Instrumental Audio Samples
5	30	Dr. Suman Deb (NIT Surat)*; Snigdha Chandratre (Sardar Vallabhbhai National Institute of Technology, Surat); Pankaj C Warule (SVNIT Surat); siba prasad mishra (SVNIT surat)	LSTM and GRU based Common Cold Detection from Speech Signal

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**LUNCH**
**TIME 13.15 – 14.15 IST**


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**Keynote Lecture 2:** Dr. Kaustuv Kanti Ganguly, Zayed University, Abu Dhabi  
How 'different' is different: Towards making a knowledgeable Music AI 'wiser'

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### **Track: Interdisciplinary Applications**

Session Chair:-

<b>Serial No.</b>	<b>Paper ID</b>	<b>Authors and Affiliation</b>	<b>Title of the Paper</b>
1	18	Sunil John (Govt. College, Madappally)*; Bibish Kumar K T (Govt. College Madappally); Muraleedharan K M (Govt. College, Madappally); Sunil Kumar R K (Department of Information Technology, KeralaKannur University)	CLASSIFICATION OF DRAVIDIAN ACCENTS OF MALAYALAM USING ACR-MFCC
2	20	Rimi Ghosh Dastidar (West Bengal Education Service)*	Recitation vs singing: a prosodic intervention
3	21	Himabindu Matta; Puja Bharati; SBYASACHI CHANDRA; Satya Prasad G; Shyamal Kumar Das Mandal; Nirmalya Ghosh (Indian Institute of Technology Kharagpur)	Acoustic Phonetic Analysis of Vowels of Native Bengali Speakers with Parkinson's Disease
4 (Virtual)	31	Rajoshree Chatterjee (SRM University, Andhra Pradesh)*	Understanding the Interplay of Music, Motion and Memory in Bengali Elementary Chharas (Nursery Rhymes)
5	34	Archi Banerjee, Medha Basu, Shankha Sanyal, Junmoni Borgohain, Priyadarshi Patnaik (IIT Kharagpur)	Perception of Devotion and Happiness in Indian Spiritual Music: An Acoustical and Audience Response Exploration

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**Day 1: Session 6: Keynote Lectures**

**TIME 16.30 – 18.15 IST**

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**Session Chair:**

**Keynote Lecture 3:** Prof. Sahinii Lemaina Veikho, IIT Delhi

Prosody in Speech Communication and Modeling of Fundamental Frequency Contours

**Keynote Lecture 4:** Prof Keikichi Hirose, Tokyo University (Virtual)

Prosody in Speech Communication and Modeling of Fundamental Frequency Contours

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**CULTURAL PROGRAMME:**

**19.00-20.00 IST**

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**DIRECTOR'S DINNER**

**TIME: 20:00 ONWARD**

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-----*End of Day One*-----

**SATURDAY (DAY 2)**

**AUGUST 5, 2023**

**Breakfast  
IST**

**TIME: 08:00 - 09:00**

**Day 2: Session 7: Keynote Lecture**

**TIME 09.00 – 10.00 IST**

**Session Chair:**

**Keynote Lecture 5:** Prof. Alexander Lerch, Georgia Tech University (Virtual)  
The Data Challenge in Music Information Retrieval.

**Day 2: Contributory Session 8**

**TIME 10:00 - 11:00 IST ---**

## **Track Music**

**Session Chair:-**

<b>Serial No.</b>	<b>Paper ID</b>	<b>Authors and Affiliation</b>	<b>Title of the Paper</b>
1	5	Revathi Raveendran *; Yeshoda Krishna (All India Institute of Speech and Hearing)	Vocal Tract Formants in trained Carnatic singers
2 (Virtual)	16	Anirban Patranabis; Kaushik Banerjee (Sir C.V. Raman centre for Physics & Music, Jadavpur University)	AN APPROACH OF SIMILARITY MEASURE IN HINDUSTANI MUSIC
3	29	Pratap A Kygonahalli; Vaibhav Katariya); Ms. Ashwini (PES University)	Regression Approach for Shruthi Identification from Indian Classical Instrumental Polyphonic Audio
4	35	Medha Basu, Shankha Sanyal, Archi Banerjee, Ranjan Sengupta, Kumardeb Banerjee, Dipak Ghosh (Jadavpur University)	Identifying Correlations Between Hindustani Music And The Brain: A Nonlinear EEG based exploration

**Tea Break**

**TIME: 11.00 – 11.15 IST**

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**Day 2: Session 9: Keynote Lecture**

**TIME 11.15 – 12.00 IST**

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**Session Chair:**

**Keynote Lecture 6:** Prof. Keith deSa, Nowrosjee Wadia college, Poona University  
A Brief Study of the Physics of Some Indian Musical Instruments

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**Day 2: Session 10: Contributory Session 10**

**TIME 12:00 - 13:00 IST ---**

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**Track: Music and Speech**

**Session Chair:-**

<b>Serial No.</b>	<b>Paper ID</b>	<b>Authors and Affiliation</b>	<b>Title of the Paper</b>
1	9	Pankaj C Warule (SVNIT Surat)*; siba prasad mishra (SVNIT surat); Sudhansu Sekhar Nayak (Sardar Vallabhbhai National Institute of Technology Surat); Dr. Suman Deb (NIT Surat)	Fourier Model-Based Analysis of LP Residual For Diagnosing Parkinson's Disease Using Speech
2	11	KOPPINENI HARISH ARJUN (KL UNIVERSITY)*; KATAKAM VENKATA NAGA SAI MANISH (KLUNIVERSITY) <b>(not registered yet)</b>	Spoken Keyword Detection
3	12	Eeshan Wairagade; Dhananjay Mishra); Anushka Chauhan (Indian Institute of Information Technology Nagpur) <b>(not registered yet)</b>	ML Based Application for Enhanced Communication With Specially Abled Children
4 (Virtual)	17	Kaushik Banerjee (Sir C.V. Raman centre for Physics & Music, Jadavpur University)*	'ALANKARAN' IN HINDUSTANI VOCAL MUSIC
5	32	Shobha S Lolge (Lokmanya Tilak College of Engineering)*	Identification and Classification of Singing Birds using Machine Learning

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**LUNCH**

**TIME: 13.00 – 14.00 IST**

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**Day 2: Session 11: Keynote Lectures**

**TIME 14.00 – 15.00 IST**

**Session Chair:**

**Keynote Lecture 7:** Prof. Ajish. Abraham, AIISH, Mysore

Applications of speech processing algorithms in our daily life

**Day 2: Contributory Session 12**

**TIME 15:00 - 16:15 IST**

### **Track Speech, Music and Interdisciplinary**

**Session Chair:-**

<b>Serial No.</b>	<b>Paper ID</b>	<b>Authors and Affiliation</b>	<b>Title of the Paper</b>
1	14	Sahana Srinivasan*; Swapna N (All India Institute of Speech and Hearing)	IMPACT OF 'BE CLEAR' TREATMENT PROGRAM ON INTELLIGIBILITY AND SLOPES OF SECOND FORMANT TRANSITIONS IN ADULTS WITH POST-STROKE DYSARTHRIA
2	22	SABYASACHI CHANDRA ; Puja Bharati; Satya Prasad G; Debolina Pramanik); Shyamal Kumar Das Mandal (Indian Institute of Technology Kharagpur)	Recent Advancement in Accent Conversion using Deep Learning Techniques: A comprehensive review
3	27	ADITI MANDAL; Anirban Patranabis (Sir C V Raman Centre for Physics and Music)	A comparative Study of the cues of the non-nasal and nasal voice in Hindustani vocal music
4	26	Satya Prasad G *; Anuj Patel (Pandit Deendayal Energy University); SABYASACHI CHANDRA); Puja Bharati); Nirmalya Ghosh); Shyamal Kumar Das Mandal (Indian Institute of Technology Kharagpur)	Speech Enhancement: Traditional and Deep Learning Techniques
5	36	Shankha Sanyal, Pijush Kanti Gayen, Shabaz Hoque, Rajanya Purkait, Tiasha Banerjee, Samir Karmakar and Dipak Ghosh (Jadavpur University)	Perceptual and neural correlates of Multi-Verb constructions in Bengali language

**Tea Break**

**TIME: 16.15 – 16.30 IST**

**Day 2: Session 13: Keynote Lecture**

**TIME 16.30 – 17.30 IST**

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**Session Chair:**

**Keynote Lecture 8: Prof Martin Norgaard, Georgia State University**

Patterns in improvisations: A key component underpinning the flow experience

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**VALEDICTORY SESSION**

**TIME: 17:30-18:30 IST**

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*-----End of Day Two-----*