

INDO-ITALY JOINT WORKSHOP

On

Emergent Magnetic Storage Devices and Sensors

18-19 November, 2025

School of Materials Science and Technology

Indian Institute of Technology (BHU), Varanasi

Dr. Shrawan Mishra

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Web- <https://quantum-lab-conference.vercel.app/>

Expert Speakers



Dr. Alessandro Magni



Dr. Michaela Kuepferling



Dr. Vittorio Basso



IIT INDIAN
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BANARAS HINDU UNIVERSITY

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DI RICERCA METROLOGICA



About the Workshop – A Platform for Bilateral Research

This section provides a clear objective, detailing the workshop's focus on modern technological progress and its aim to foster future international collaboration in materials science and spintronics.

Core Objectives

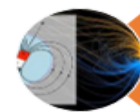
The Indo–Italy Joint Workshop aims to provide a dedicated collaborative platform for leading scientists, researchers, and academicians from both India and Italy. The primary goal is to facilitate deep discussion on modern trends, innovative methodologies, and practical applications within the field of magnetic materials, advanced memory devices, and sophisticated sensing technologies.

Technological Focus

Given the rapid technological advancements in nanotechnology and spintronics, new materials and complex device architectures are fundamentally transforming the methods by which information is stored, detected, and ultimately utilised. This workshop is strategically designed to emphasise next-generation memory systems, high-sensitivity magnetic sensors, and principles of sustainable device engineering.

Through structured keynote talks, dedicated research sessions, and interactive discussions, participants will gain invaluable insights and precisely identify emerging opportunities for impactful bilateral research collaboration, strategic joint projects, and comprehensive academic exchange programmes between the two nations.

Key Workshop Themes



Magnetic sensors innovations for environmental monitoring, biomedical and soft robotics.



Recent breakthroughs in magnetic storage technologies like MRAM and spin-orbit torque devices.



To promote Indo-Italian academic and industrial collaborations.



Workshop Organising Committee

The organising committee details the key academic leadership from IIT (BHU) responsible for the workshop's successful execution, demonstrating institutional backing and expertise.

Academic Leadership and Coordination

Patron:

Prof. Amit Patra, Director, IIT (BHU), Varanasi

Organising committee:

1. Prof. Rajiv Prakash
2. Prof. Pralay Maiti
3. Prof. Chandana Rath
4. Prof. Akhilesh Kumar Singh
5. Prof. Chandan Upadhyay (Coordinator, SMST)
6. Prof. Bhola Nath Pal
7. Prof. Ashish Kumar Mishra
8. Prof. Shrawan Kumar Mishra (Convenor)
9. Prof. Sanjay Singh
10. Prof. Nikhil Kumar
11. Prof. Ravi Panwar
12. Prof. Uday Sanker
13. Prof. Shivam Verma
14. Prof. Sandip Chatterji
15. Prof. Gautam Anand (Treasurer/Secretary)



Essential Registration Details

Clear, mandatory information regarding application deadlines, participation limits, and the required registration fees across different academic tiers.

Registration Guidelines



Registration Fees (INR)

Early-career researchers/ faculty	₹3500
PhD students	₹2500
Master’s students	₹1500

Accommodation: Accommodation for participants will be arranged on a mandatory **payment basis** within the campus or nearby facilities.
(deadline: 30/10/2025)

🔗 **How to Register:** Register online via Google Form.
Scan the QR code below to access the registration link instantly and secure your slot.

<https://forms.gle/bdx3nxQ8WaiSqW6VA>

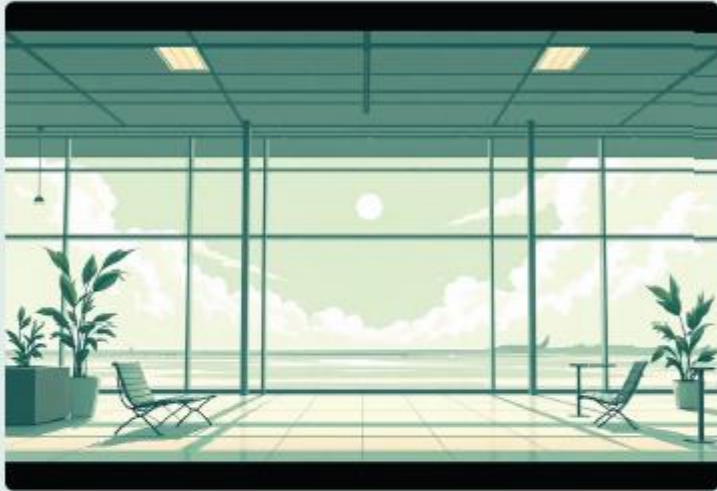


Bank Details:	
(i) Name of Account -	IIT(BHU)-Main Account (Institute Development Fund)
(ii) Account No. -	32778803937
(iii) Account Type -	Current Account
(iv) Account Holder Name-	The Registrar, IIT(BHU)
(v) Name of Bank & Add.-	State Bank of India, IT-BHU Branch (Branch Code- 11445) IIT(BHU), Campus, Varanasi-221 005 Ph. No.: 0542-2369181
(vi) IFSC Code -	SBIN0011445

Getting to Varanasi :Your Travel Guide

Varanasi, a spiritual and cultural heartland, is exceptionally well-connected, making it accessible to both domestic and international tourists. Here is a comprehensive guide to reaching the Holy City.

✈ By Air: Lal Bahadur Shastri International Airport (VNS)



VNS serves as the main gateway, offering robust domestic services and limited international flights. It is located approximately **26 km from the city centre**.

- Direct connections available from major Indian hubs: Delhi, Mumbai, Kolkata, Bengaluru, and Hyderabad.
- Transfer options: Taxis, pre-booked airport shuttles, and popular ride-hailing apps (Ola, Uber) ensure a hassle-free journey into the city or to specific destinations like Banaras Hindu University (32 km).

🚆 By Train: A Major Rail Hub



Rail travel remains the most popular and economical way to reach Varanasi, as it is a major junction linking the city to all corners of India.

- **Varanasi Junction (BSB):** The primary station for express and superfast trains.
- **Banaras Railway Station (BSBS):** An important secondary terminal.
- **Pt. Deen Dayal Upadhyaya Junction (DDU):** A key interchange connecting multiple long-distance routes.
- Frequent services run to and from Delhi, Kolkata, Mumbai, and Chennai.

🚗 By Road: Extensive Highway Network



Varanasi is well-integrated into the national and state highway system, making road travel smooth from neighbouring states and cities.

- Direct road links exist with major metropolitan areas like Delhi, Agra, Lucknow, Prayagraj, and Patna.
- **Intercity and State Transport Buses:** Regular services are available, terminating primarily at the Chaudhary Charan Singh Bus Stand (Varanasi Cantt Bus Station).