



Advanced School and Conference on Quantum Matter | (SMR 4114)

01 Dec 2025 - 12 Dec 2025
ICTP, Italy

3 Directors

1. IQBAL Yasir	(In Pers.)	Indian Institute of Technology Madras Department of Physics	India
2. KISELEV Mikhail	(In Pers.)	ICTP	Italy
3. SACHDEV Subir	(In Pers.)	Harvard University Department of Physics Lyman Laboratories	United States of America

4 Lecturers

1. BECCA Federico	(In Pers.)	University of Trieste	Italy
2. LU Yuanming	(In Pers.)	The Ohio State University	United States of America
3. SAMAJDAR Rhine	(In Pers.)	Princeton University	United States of America
4. VIDAL Julien Alexis	(In Pers.)	Sorbonne University	France

39 Speakers

1. ASSAAD Fakher	(In Pers.)	Universitat Wurzburg Institut fur Theoretische Physik und Astrophysik	Germany
2. BERG Erez	(In Pers.)	The Weizmann Institute of Science	Israel
3. BONETTI Pietro Maria	(In Pers.)	Harvard University Dept. of Physics	United States of America
4. CAPPONI Sylvain Denis Jean	(In Pers.)	Universite de Toulouse Laboratoire de Physique Theorique	France
5. CHO Gil Young	(In Pers.)	Korea Advanced Institute of Science & Technology	Republic of Korea
6. CHUBUKOV Andrey V	(In Pers.)	FTPI - University of Minnesota	United States of America
7. DAMLE Kedar	(In Pers.)	Tata Institute of Fundamental Research Department of Theoretical Physics	India
8. DOUCOT Benoit	(In Pers.)	Universite' de Paris VI (Pierre et Marie Curie) Laboratoire de Physique Theorique et Hautes Energies	France
9. GAZIT Snir	(In Pers.)	The Hebrew University of Jerusalem	Israel
10. HERMELE Michael Aaron	(In Pers.)	University of Colorado	United States of America
11. KEE Hae Young	(In Pers.)	University of Toronto	Canada
12. KIM Yong Baek	(In Pers.)	University of Toronto Department of Physics	Canada
13. KNOLLE Johannes	(In Pers.)	Technische Universität München Physics Department TQM Group	Germany
14. LAEUCHLI HERZIG Andreas Martin	(In Pers.)	École Polytechnique Fédérale de Lausanne	Switzerland
15. LEE Sung-Bin	(In Pers.)	Korea Advanced Institute of Science and Technology	Republic of Korea
16. LIU Chunxiao	(In Pers.)	University of California Department of Physics	United States of America
17. MENG Ziyang	(In Pers.)	The University of Hong Kong	China, Hong Kong Special Adminis
18. MESSIO Laura Liliane Louisette	(In Pers.)	LPTMC - Sorbonne Université	France
19. MOESSNER Roderich	(In Pers.)	MPI	Germany
20. MOORE Joel Ellis	(In Pers.)	University of California Department of Physics	United States of America
21. MOTOME Yukitoshi	(In Pers.)	The University of Tokyo	Japan
22. OSHIKAWA Masaki	(In Pers.)	The University of Tokyo Institute for Solid State Physics ISSP Oshikawa Group	Japan
23. PARAMEKANTI Arun	(In Pers.)	University of Toronto Department of Physics	Canada
24. PENC Karlo	(In Pers.)	Wigner Research Centre for Physics Institute for Solid State Physics and Optics	Hungary
25. PERKINS Natalia Borisovna	(In Pers.)	University of Minnesota	United States of America
26. PICHLER Hannes	(In Pers.)	University of Innsbruck Austrian Academy of Sciences Institute for Quantum Optics & Quantum Information	Austria
27. POLLMANN Frank	(In Pers.)	Technical University of Munich	Germany

28.	RAN Ying	(In Pers.)	Boston College	United States of America
29.	SANDVIK Anders Wilhelm	(In Pers.)	Boston University Department of Physics	United States of America
30.	SHANNON Sean Patrick Nicholas	(In Pers.)	OIST	Japan
31.	SHTENGEL Kirill	(In Pers.)	University of California	United States of America
32.	SODEMANN VILLADIEGO Inti Antonio Nicolas	(In Pers.)	University of Leipzig	Germany
33.	TREBST Simon	(In Pers.)	University of Cologne	Germany
34.	TRIPATHI Vikram	(In Pers.)	Tata Institute of Fundamental Research (TIFR)	India
35.	VON DELFT Jan	(In Pers.)	Ludwig-Maximilians-Universitat Munchen Lehrstuhl fur Theoretische Festkorperphysik Sektion Physik	Germany
36.	WIETEK Alexander	(In Pers.)	MPIPKS	Germany
37.	XU Cenke	(In Pers.)	University of California At Santa Barbara Department of Physics	United States of America
38.	ZHOU Yi	(In Pers.)	Chinese Academy of Sciences Institute of Physics	China
39.	ZOU Liujun	(In Pers.)	National University of Singapore	Singapore

157 Participants

1.	ABBRUCIATI Federico	(In Pers.)	European Synchrotron Radiation Facility, ESRF	France
2.	ABDULLA Mohammad Faruk	(In Pers.)	Technion-Israel Institute of Technology Department of Physics	Israel
3.	ADIRA Mohitha	(In Pers.)	Nanyang Technological University (NTU) School of Physical and Mathematical Sciences (SPMS)	Singapore
4.	AFRICANI Nazzareno	(In Pers.)	SISSA	Italy
5.	ALI Asad	(In Pers.)	Hamad Bin Khalifa University Qatar Center For Quantum Computing Department of Engineering Science	Qatar
6.	ANDREONI Riccardo	(In Pers.)	SISSA - Scuola Internazionale di Studi Superiori Avanzati, Condensed Matter group	Italy
7.	ARA Nisa	(In Pers.)	Tata Institute of Fundamental Research	India
8.	ARILDSEN Mark Jesse	(In Pers.)	University of Vienna Faculty of Physics	Austria
9.	ASAFOV Daniil	(In Pers.)	KU Leuven	Belgium
10.	BACCICONI Zeno	(In Pers.)	SISSA - Scuola Internazionale Superiore di Studi Avanzati	Italy
11.	BANERJEE Archi	(In Pers.)	Max Planck Institute for the Physics of Complex Systems	Germany
12.	BARARI Saeed	(In Pers.)	Institute for Advanced Studies in Basic Sciences	Iran (Islamic Republic of)
13.	BAUER Tim Yannik	(In Pers.)	The University of Tokyo Department of Applied Physics Motome Group	Japan
14.	BIEDERMANN Jan	(In Pers.)	TU Dresden Institut für Theoretische Physik Emmy Noether Junior Research Group Quantum Critical Matter	Germany
15.	BORUTTA JANARTHANARAMAN Hariprasaad	(In Pers.)	Indian Institute of Technology Madras	India
16.	BRAUN Felizia Yara Sofie	(In Pers.)	Technical University Munich Department of Physics PH-I Knap Group : Collective Quantum Dynamics	Germany
17.	BREDA ZACHE' Victor	(In Pers.)	Federal University of Rio Grande do Norte Department of Theoretical and Experimental Physics	Brazil
18.	BUDARAJU Sasank	(In Pers.)	Université Paul Sabatier LPT - IRSAMC (UMR 5152 CNRS/UPS)	France
19.	BUENO XAVIER Guillermo Hernan	(In Pers.)	Abdus Salam International Centre for Theoretical Physics (ICTP)	Italy
20.	CABRA Daniel Carlos	(In Pers.)	Universidad Nacional de La Plata Departamento de Fisica	Argentina
21.	CAI Peiyuan	(In Pers.)	Chinese Academy of Sciences Institute of Physics	China
22.	CAPELO DOMINGUES Gabriel	(In Pers.)	Universidade de São Paulo Instituto de Física	Brazil
23.	CARREIRA DE JESUS TORRES Rafael	(In Pers.)	Universidade de Lisboa - CeFEMA Instituto Superior Técnico	Portugal
24.	CHAKRABORTY Nilotpal	(In Pers.)	Max Planck Institute for the Physics of Complex Systems	Germany
25.	CHANDA Titas	(In Pers.)	Indian Institute of Technology Madras (IITM)	India

26.	CHATTERJEE Sourin	(In Pers.)	Indian Institute of Technology, Madras	India
27.	DALMASSO Anna	(In Pers.)	University of Nottingham Condensed Matter Theory Group	United Kingdom of Great Britain and
28.	DARWISH Esa	(In Pers.)	Institute for Advanced Studies in Basic Sciences Physics Department	Iran (Islamic Republic of)
29.	DAS Hiranmay	(In Pers.)	Indian Institute of Science Bengaluru	India
30.	DASH Soumyaranjan	(In Pers.)	Indian Institute of Science Education and Research (IISER) Mohali	India
31.	DATTA Soujanya	(In Pers.)	Saha Institute of Nuclear Physics	India
32.	D'AURIA Giuseppe	(In Pers.)	SISSA	Italy
33.	DE Ayush	(In Pers.)	Hebrew University of Jerusalem Racah Institute of Physics	Israel
34.	DEBNATH Shreya	(In Pers.)	Department of Physics Indian Institute of Technology Guwahati	India
35.	DE CASTRO BELLINATI Carlo	(In Pers.)	University of Sao Paulo Institute of Physics	Brazil
36.	DORLAS Teunis Christiaan	(In Pers.)	Dublin Institute for Advanced Studies	Ireland
37.	DUSEL Felix Michael	(In Pers.)	Technical University of Munich	Germany
38.	EGGER Jan	(In Pers.)	Technische Universität München CMT Group	Germany
39.	ESMER Berna	(In Pers.)	École Polytechnique Fédérale de Lausanne (EPFL) Institute of Physics (IPHYs) Laboratory for Quantum Magnetism (LQM)	Switzerland
40.	FENG Shi	(In Pers.)	Technical University of Munich Physics Department	Germany
41.	FLORES CALDERON Rafael Alvaro	(In Pers.)	Technical University of Munich	Germany
42.	FRANCHINI Fabio	(In Pers.)	Ruder Boskovic Institute Division of Theoretical Physics Condensed Matter and Statistical Physics Group	Croatia
43.	FRANCUZ Anna Elzbieta	(In Pers.)	University of Vienna Faculty of Physics	Austria
44.	GALVEZ POBLETE David Fabian	(In Pers.)	Universidad de Santiago de Chile Departamento de Fisica	Chile
45.	GIUDICI Giuliano	(In Pers.)	University of Innsbruck Institute for Theoretical Physics	Austria
46.	GONZALEZ Matías Gabriel	(In Pers.)	University of Bonn Physikalisches Institut	Germany
47.	GRANBERG CAUCHI Sabastian Charles Jan	(In Pers.)	TU Dresden Institute for Theoretical Physics Wuerzburg-Dresden Cluster of Excellence ct.qmat	Germany
48.	GUPTA Manoj	(In Pers.)	Bose National Centre for Basic Sciences, Kolkata Department of Condensed Matter Physics and Materials Science	India
49.	HABEL Jonas	(In Pers.)	Technical University of Munich, Department of Physics - Condensed Matter Theory	Germany
50.	HALDER Dipendu	(In Pers.)	Indian Institute of Technology Guwahati Department of Physics	India
51.	HASSAN Noah Medhat Mohammed Louis	(In Pers.)	Freie Universität Berlin Institut für Theoretische Physik, AG Reuther	Germany
52.	HEFEL Martin	(In Pers.)	Technical University of Munich TUM School of Natural Sciences - Solid-State Theory	Germany
53.	HILLE Simon Hans	(In Pers.)	University of Zürich Physics-Institute	Switzerland
54.	HOUHOU Ousama	(In Pers.)	University of Medea Faculty of Sciences	Algeria
55.	JADIDI KOUHBANANI Fatemeh	(In Pers.)	Institute for Advanced Studies in Basic Sciences	Iran (Islamic Republic of)
56.	KALINOWSKI Stanislaw	(In Pers.)	University of Warsaw Institute of Theoretical Physics	Poland
57.	KAMPANIS Georgios	(In Pers.)	SISSA	Italy
58.	KANTHA Saurav	(In Pers.)	Université Paul Sabatier Laboratoire de Physique Théorique de Toulouse	France
59.	KAROLIYA Shubhanshu	(In Pers.)	Indian Institute Of Technology, Mandi School Of Physical Sciences	India
60.	KHAJURIA Shobhit	(In Pers.)	Harish Chandra Research Institute, prayagraj (Allahabad)	India
61.	KHAN Sakil	(In Pers.)	Indian Institute of Science Education and Research, Pune Physics Department	India
62.	KIM Jaehwon	(In Pers.)	European Synchrotron Radiation Facility	France
63.	KIM Taekyoung	(In Pers.)	Ludwig-Maximilians-Universität München Physics	Germany

64.	KOLEY Anish	(In Pers.)	Universität Leipzig Institut Für Theoretische Physik	Germany
65.	KOLLER Eduard Ferdinand Vitus	(In Pers.)	Technical University Munich Physics Department TQM-T80 Theory of Quantum Matter	Germany
66.	KOMAR Rafal	(In Pers.)	University of Warsaw Faculty of Physics	Poland
67.	KONDAKOR Mark	(In Pers.)	Wigner Research Centre for Physics Institute for Solid State Physics and Optics	Hungary
68.	KRANITZ Peter	(In Pers.)	Wigner Research Centre for Physics Institute for Solid State Physics and Optics Quantum Materials Research Group	Hungary
69.	KUMAR Sankalp	(In Pers.)	Indian Institute of Technology Bombay Department of Physics	India
70.	KUNDU Souvik	(In Pers.)	International Centre for Theoretical Sciences	India
71.	LAHIRI Srijata	(In Pers.)	Indian Institute of Technology Guwahati Department of Physics	India
72.	LAMMA Eleonora	(In Pers.)	Sissa	Italy
73.	LEITAO SOUSA RIBEIRO Afonso	(In Pers.)	Laboratoire Leon Brillouin Cea Saclay	France
74.	LIN Jonathan	(In Pers.)	Technion - Israel Institute of Technology	Israel
75.	LISANDRINI Franco Thomas	(In Pers.)	Universität Bonn	Germany
76.	LIU Peiyao	(In Pers.)	Institute of Physics Chinese Academy of Sciences Key Laboratory of Condensed Matter Theory and Computation	China
77.	LOZANO GOMEZ Daniel	(In Pers.)	Technische Universität Dresden	Germany
78.	MAHDAEI Seyedhossein	(In Pers.)	Sharif University of Technology Physics Department	Iran (Islamic Republic of)
79.	MAITY Avijit	(In Pers.)	Tata Institute of Fundamental Research (TIFR), Mumbai Department of Theoretical Physics	India
80.	MAJUMDER Ritwika	(In Pers.)	National Institute of Science Education and Research, Bhubaneswar	India
81.	MAKRIS Grigorios	(In Pers.)	RWTH Aachen University Institute for Theoretical Solid State Physics	Germany
82.	MALLADI Ananth Venkatesh Narasimha	(In Pers.)	University of Chicago Department of Physics	United States of America
83.	MANGEOLLE Leo Charles Henri Maurice Albert	(In Pers.)	Technische Universität München (TUM)	Germany
84.	MAO Dan	(In Pers.)	University of Zurich Department of Physics	Switzerland
85.	MARINHO PEREIRA DE MELO Marcus Vinicius	(In Pers.)	University of Sao Paulo Institute of Physics	Brazil
86.	MARTINS CARVALHO Isaac	(In Pers.)	Institute of Chemistry - UNESP	Brazil
87.	MOHAMMADI Sepideh	(In Pers.)	Institute for Advanced Studies in Basic Sciences (IASBS)	Iran (Islamic Republic of)
88.	MOUSAVI Zahra	(In Pers.)	Institute for Advanced Studies in Basic Sciences (IASBS) Department of Physics	Iran (Islamic Republic of)
89.	MUELLER-GROELING Mark Henrik	(In Pers.)	Max Planck Institute for Solid State Research Department for Many Body Theory	Germany
90.	MUKHERJEE Arkaprava	(In Pers.)	The Ohio State University Department of Physics	United States of America
91.	NEEHUS Avedis Eric Albert	(In Pers.)	Technical University of Munich Department of Physics - Theory of Quantum Matter	Germany
92.	NGUYEN Hanh Dung	(In Pers.)	University of Cologne Institute for Theoretical Physics	Germany
93.	NIGAM Harsh	(In Pers.)	International Centre for Theoretical Sciences (ICTS- TIFR)	India
94.	NINA CARREIRA FERREIRA DA CRUZ Jose Maria	(In Pers.)	University College Dublin School of Physics	Ireland
95.	PACHHAL Subrata	(In Pers.)	Indian Institute Of Technology Physics Department	India
96.	PAL Adipta	(In Pers.)	Max Planck Institute for the Physics of Complex Systems	Germany
97.	PAL Sudeshna	(In Pers.)	Indian Institute of Technology Madras (IIT Madras) Department of Physics	India
98.	PAL Sukla	(In Pers.)	Lancaster University Department of Physics	United Kingdom of Great Britain an
99.	PALUMBO Beatrice	(In Pers.)	Technische Universität München	Germany
100.	PANAHI Yasamin Sadat	(In Pers.)	Perimeter Institute for Theoretical Physics	Canada
101.	PANDEY Jay	(In Pers.)	Tata Institute of Fundamental Research, Mumbai Department of Theoretical Physics	India
102.	PARK Jemin	(In Pers.)	Korea Advanced Institue of Science and Technology	Republic of Korea
103.	PARTHASARATHY Manikandan	(In Pers.)	RKM Vivekananda College Department of Physics	India

104.	PATEL Nishit Belaben	(In Pers.)	Jawaharlal Nehru Centre for Advanced Scientific Research	India
105.	PATEL Rahul Pratap	(In Pers.)	Indian Statistical Institute Kolkata Physics and Applied Mathematics Unit	India
106.	PATIL Pranay Mahesh	(In Pers.)	Indian Institute of Technology Madras (IITM)	India
107.	PATIL Vinay Rajendra	(In Pers.)	Max Planck Institute for the Physics of Complex Systems	Germany
108.	PATRICOLO Miriam	(In Pers.)	TU Wien	Austria
109.	PEREIRA DE BARROS FORNI Paulo	(In Pers.)	Max-Planck Institut für Festkörperforschung	Germany
110.	PHAM Nhat Minh	(In Pers.)	SISSA	Italy
111.	PUTZER Bernhard Gabriel	(In Pers.)	University of Stuttgart Institute for Theoretical Physics III	Germany
112.	RABELO Lucas Gabriel	(In Pers.)	Universidade de São Paulo Instituto de Física	Brazil
113.	RAI Kshiti Sneh	(In Pers.)	Universiteit Leiden Leiden Institute of Physics	Netherlands (Kingdom of the)
114.	RAIKOS Andreas	(In Pers.)	Université de Toulouse	France
115.	RAJ Anoop	(In Pers.)	Indian Institute of Technology Bombay Department of Physics Theoretical Condensed Matter Physics Group	India
116.	RAJA Alwyn Jose	(In Pers.)	Indian Institute of Technology, Madras Department of Physics	India
117.	REIS DE LIMA Lorena	(In Pers.)	Université de Montréal Département Physique	Canada
118.	RITU	(In Pers.)	The Abdus Salam International Center for Theoretical Physics (ICTP)	Italy
119.	ROUXEL Malo Clement Yohann	(In Pers.)	CY Cergy Paris Université LPTM - Laboratoire de Physique Théorique et Modélisation	France
120.	ROY Koustav	(In Pers.)	Indian Institute of Technology Guwahati Department of Physics	India
121.	RUDNER Laszlo	(In Pers.)	HUN-REN Wigner Research Centre for Physics	Hungary
122.	SAHU Dibyajyoti	(In Pers.)	Indian Institute of Science Education and Research Bhopal Department of Physics	India
123.	SAHU Krushna Chandra	(In Pers.)	International Center for Theoretical Sciences	India
124.	SALGADO LINARES Ignacio	(In Pers.)	Technische Universität München TUM School of Natural Sciences Theory of Quantum Matter group	Germany
125.	SAMANTA Diganta	(In Pers.)	Indian Institute of Technology Kharagpur	India
126.	SAU Indrajit	(In Pers.)	International Centre for Theoretical Sciences (ICTS)	India
127.	SEETHARAMAN Siddharth	(In Pers.)	Indian Institute of Science Education and Research Pune (IISER Pune)	India
128.	SEN Snehasish	(In Pers.)	Indian Institute of Technology, Kharagpur Department of Physics	India
129.	SERVI Joele Alberto Nathan	(In Pers.)	SISSA Condensed Matter	Italy
130.	SHIMIZU Kotaro	(In Pers.)	The University of Tokyo Department of Applied Physics	Japan
131.	SKURATIVSKA Anastasiia	(In Pers.)	Leiden University	Netherlands (Kingdom of the)
132.	SONG Menghan	(In Pers.)	-	China
133.	SOYOUF JAHROMI Seyed Saeed	(In Pers.)	Institute for Advanced Studies in Basic Sciences (IASBS)	Iran (Islamic Republic of)
134.	SRIDHARAN Srinidhi	(In Pers.)	BITS Pilani	India
135.	SRIVASTAVA Pritesh	(In Pers.)	Tata Institute of Fundamental Research Department of Condensed Matter Physics and Materials Science	India
136.	STAFFIERI Gregorio	(In Pers.)	SISSA	Italy
137.	STERN Matthew Samuel	(In Pers.)	University of California, Irvine	United States of America
138.	STOCKER Lidia	(In Pers.)	Max Planck Institute for the Physics of Complex Systems	Germany
139.	SZABO Attila	(In Pers.)	University of Zurich	Switzerland
140.	TAGLIENTE Antonio Maria	(In Pers.)	SISSA	Italy
141.	TILLSCHNEIDER Marc-Philipp	(In Pers.)	Technische Universität München Physik	Germany
142.	TOGNOCCHI Francesco	(In Pers.)	Università di Trieste	Italy
143.	TOROK Matyas	(In Pers.)	Budapest University of Technology and Economics (BME)	Hungary

144.	ULAGA Martin	(In Pers.)	Max Planck Institute for the Physics of Complex Systems	Germany
145.	VEDULA Ramana Bharadwaj	(In Pers.)	Indian Institute of Science Education and Research	India
146.	VISWANATHAN Balakrishnan	(In Pers.)	Indian Institute of Technology Madras Center for Quantum Information, Communications and Computing	India
147.	WALICKI Mikolaj Marek	(In Pers.)	University of Warsaw Faculty of Physics	Poland
148.	WALKLING James Ross	(In Pers.)	Max Planck Institute for the Physics of Complex Systems	Germany
149.	WALTHER Luis Benedikt	(In Pers.)	Max Planck Institute for the Physics of Complex Systems Division Condensed Matter	Germany
150.	WANG Ting-Tung	(In Pers.)	The University of Hong Kong Department of Physics	China, Hong Kong Special Adminis
151.	WILLSHER Josef David	(In Pers.)	Max-Planck-Institut für Physik komplexer Systeme	Germany
152.	YANG Qi	(In Pers.)	University of Amsterdam Institute of Physics	Netherlands (Kingdom of the)
153.	YOUCEF KHODJA Selma	(In Pers.)	Université libre de Bruxelles Systèmes Complexes et Mécanique Statistique	Belgium
154.	ZACHARIAS Timo Hellmut Otto	(In Pers.)	TUM School of Natural Sciences Department of Physics PH-I Collective Quantum Dynamics	Germany
155.	ZENG Meng	(In Pers.)	Max Planck Institute for the Physics of Complex Systems	Germany
156.	ZENG Zhongda	(In Pers.)	Institute for Quantum Optics and Quantum Information (IQOQI)	Austria
157.	ZUENDEL Martina	(In Pers.)	CNRS - LPMMC (Laboratoire de Physique et Modélisation des Milieux Condensés)	France