

September 5, 2024

RPMBT22

Final circular



URL: <https://project.ccs.tsukuba.ac.jp/e/RPMBT22>

Dear Colleagues

The 22nd International Conference on **Recent Progress in Many-Body Theories** (RPMBT22) will be held from **23 to 27 September 2024**, in Tsukuba, Japan. A series of the conferences offers an ideal opportunity to recognize important achievements and to showcase significant new results in various aspects of many-body physics.

Presentation

The participants consist of researchers and students in different fields related to quantum many-body physics. We would like to ask all the presenters to make their presentations understandable for them.

Oral presentation

All the speakers (awardee/invited/contributed talks) are requested to upload his/her presentation file to the conference website (Indico). Please upload your presentation file at least **one day before your presentation** (you can update it afterwards). From the left menu, go to “My Contributions” and select your contribution. At the bottom of the page, you find “Presentation Materials” where you can upload the presentation file. If you do not want to open it to the public, switch on “Protected.” We recommend that you upload the **PDF** file, unless you really need to use PPT/KEY files. Name the file “Presenter’s name.pdf.”

We would like to avoid possible connection troubles with your laptop. However, if it is necessary to use your own PC for some reason (e.g., showing movies), please contact us in advance and test the connection well before your presentation.

Poster presentation

The poster session is on Tuesday. The size of the poster panel is slightly different from but approximately the A0 size. We recommend all the presenters to make their posters printed in the A0 size (841 x 1189 mm). The poster is attached to the panel with tape.

Those who wish to present short oral presentations in the *poster indexing session* on

Tuesday must upload the **one-page PDF slide** to Indico, by following the same instruction as that for the oral presenters. You should find two contributions with the same title. Select the one with “[Indexing].” *The deadline for the upload is Monday, September 23.*

Time schedule

A rough time schedule for the conference is planned as follows. The detailed conference program is available on the conference website.

	22 Sun	23 Mon	24 Tue	25 Wed	26 Thu	27 Fri	28 Sat
Arrival		Registration	CMBP	QCAMP	QI&C	QF&UG	Departure
		Opening					
		QI&C	CMP	CMBP	CMP	NP, CMBP	
						Closing	
		CMBP	NF	Free discussion	NMBP		
		QF&UG	NP		Award Session		
	Registration & Welcome Reception		Poster presentation		Conference Dinner		

CMBP: Computational many-body physics
 NF: New frontiers
 NMBP: Non-equilibrium many-body phenomena
 NP: Nuclear physics
 QCAMP: Quantum chemistry, atomic and molecular physics
 QF&UG: Quantum fluids and Ultracold gases
 QI&C: Quantum information and computing

Award Session

The award session will be held on **Thursday afternoon**, September 26, 2024. There are two awardees for the Feenberg Memorial Medal and one for the Hermann Kümmel Early Achievement Award, in 2024.



Feenberg Memorial Medal

Eduardo Fradkin has been awarded the Feenberg Memorial Medal for pioneering applications of quantum field theory to the understanding of emergent, many-body physics of quantum systems, in particular composite fermions, and electronic liquid crystalline and pair density wave phases of correlated electronic systems.

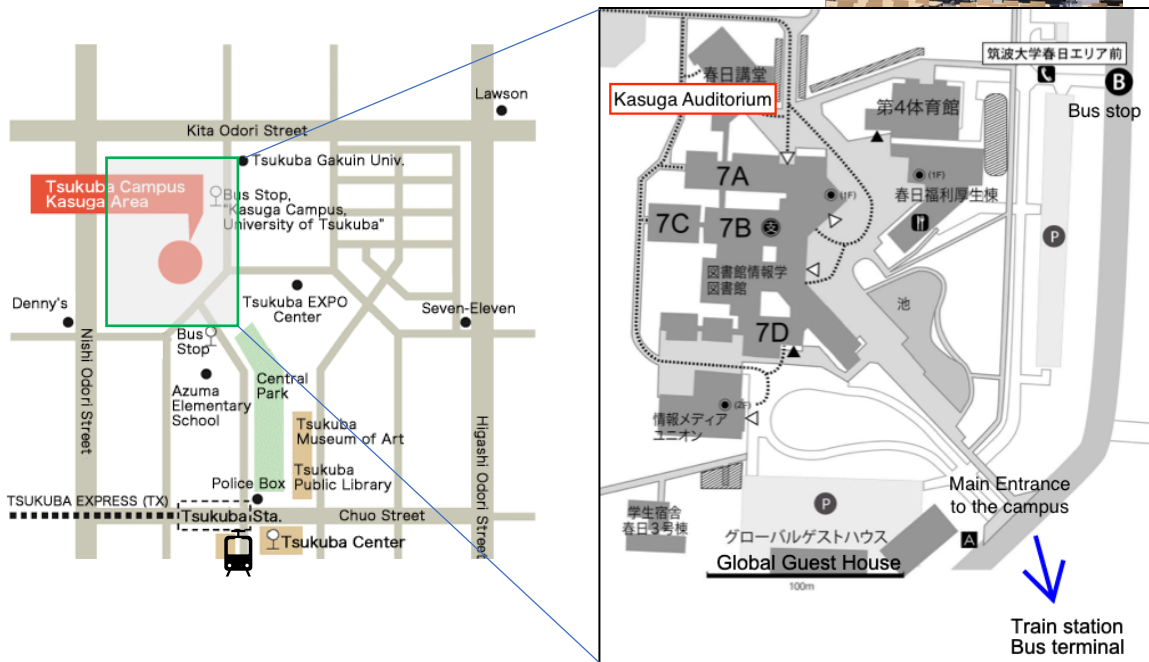
Alexei Tsvelik has been awarded the Feenberg Memorial Medal for pioneering applications of quantum field theory to the understanding of emergent, many-body physics of quantum systems, in particular the physics of magnetic impurities, disordered systems, and Majorana representations of correlated problems.

Hermann Kümmel Early Achievement Award

Riccardo Rossi has been awarded the Hermann Kümmel Early Achievement Award for young physicists whose published work is a significant contribution to quantum many-body theory. This is for groundbreaking advances in computational quantum field theory for many-fermion problems, including determinant algorithms for connected-diagram expansions and resummation techniques, leading to key results on the unitary Fermi gas and the Hubbard model.

Conference Venue

The conference will be held in Kasuga Auditorium (春日講堂) in University of Tsukuba, Tsukuba City, Japan. The venue is conveniently located on the north side of Tsukuba Station of Tsukuba Express (TX) Line, within walking distance from the station and from Tsukuba Center bus terminal.



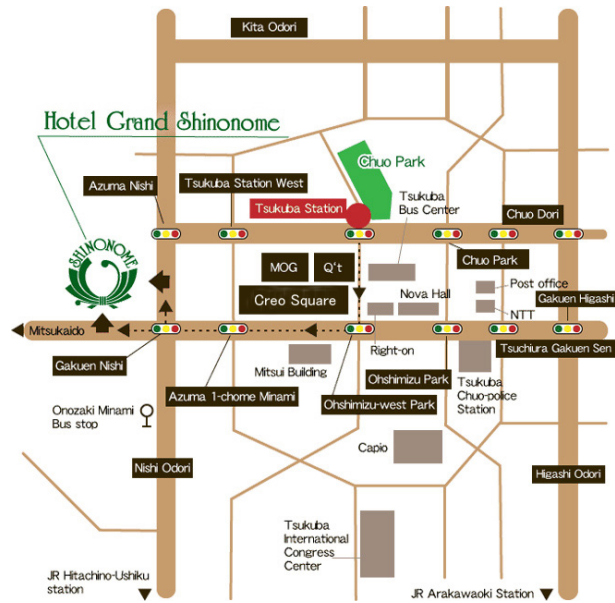
Wifi connections in the venue

The eduroam access is available at the venue. Please use your own username and password to connect to the internet. For participants who cannot use the eduroam, we may provide guest accounts of University of Tsukuba. Details will be shown at the venue.

Social Events

Conference dinner

The conference dinner will be held in the Imperial Room (2F) in [Hotel Grand Shinonome](#) (ホテルグランド東雲) on Thursday, September 26th, starting at 18:30 pm. It is within walking distance from many hotels near Tsukuba Center, about 10 minutes on foot from Tsukuba station and from the conference venue. Although we expect most of the participants to walk there, we are planning to have a shuttle service. If you want a ride, please contact the local organizers.



Welcome reception and registration

We welcome participants arriving in Tsukuba on Sunday to a welcome drink between 18:00 and 20:00 on Sunday, September 22nd, at Cafe “[Engi](#)” in Tsukuba Center. Please come to the registration desk there and get a name tag and a ticket for Japanese craft beers. It is located next to Hotel Nikko Tsukuba (ホテル日航つくば). Go downstairs in front of the hotel, and you find a small plaza and an entrance to Cafe “Engi.” You can also access from the ground floor of Hotel Nikko Tsukuba, on the opposite side of the reception desk of the hotel.

On the Sunday evening, you may find many food stands and beer booths with a large crowd in the open space, because it is within a period of the Beer Festival in Tsukuba Center. You can enjoy beers and local foods at the Festival, but do not confuse this with our welcome drink of the conference.



Students' gathering

We plan to have an additional social event on Tuesday for students only. It could be a precious opportunity for students from various countries/fields to get to know each other. Details will be announced during the session. Look forward to it.

Proceedings

The proceedings of RPMBT22 will be published as a special volume of the open-access online journal [Particles](#). All the contributions, including oral and poster presentations, will be peer reviewed prior to being accepted for publication. Details will be announced later.

https://www.mdpi.com/journal/particles/special_issues/RPMBT22

Contact information

RPMBT22 Local organizing committee: RPMBT22@ccs.tsukuba.ac.jp