

KEK Summer Student Program (KEKSSP)

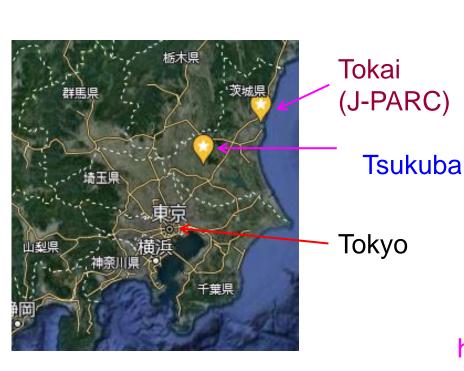
Shohei Nishida
KEK
JENNIFER3 Kickoff Meeting
Jan. 28, 2025



About KEKSSP

KEK Summer Student Program (KEKSSP)

- Official name: SOKENDAI KEK Tsukuba/J-PARC Summer Student Program
 - ✓ SOKENDAI = Graduate University for Advanced Studies
- Students: 3rd and 4th year of undergraduate, or master course.
- Stay 4-8 weeks at KEK (Tsukuba or Tokai), and work in some KEK's projects.









SOKENDAI KEK Tsukuba/J-PARC Summer Student Program

Supported by



The Graduate University for Advanced Studies, SOKENDAI



International and Inter-institution Network for Accelerator Science to Next Generation, IINAS-NX



JENNIFER2 a HORIZON2020 MSCA-RISE project, g.a. 822070

https://www.kek.jp/en/education/sokendai/ssp



About KEKSSP

- Originally started as J-PARC summer student program. This program was supported by SOKENDAI from 2017.
- In 2018, SN started a new program KEK student program at Tsukuba Campus.
- These two program are combined in 2019 → KEKSSP
 - ✓ The program in 2020-2022 was canceled due to COVID.
- Support by JENNIFER2 from 2024.
- Students study under each project separately, but there is a few days of "joint" program (lecture, tour, presentation, party) in July.

Programs:

- Elementary particle physics.
- Advanced detector technology.
- Nuclear physics.
- · Accelerator.
- Material & life science.
- Theory (Lattice).



KEKSSP 2024

- 175 students applied (see backup).
- 21 students from 15 countries attended the program.
 - ✓ 8 from Europe; 5 of them were supported by JENNIFER2.
- The staying period depends on the students and programs.
- Joint sessions on July 29 and 30.

F.3												7月														8,	1														9月								
ID	佐名	日本着	日本発	受入グループ	漢字	17 10 E ×	19 20 * *	21 22 2 * ± 1	24 2	25 27 2	0 29 30 e ± 0	1 2 F ×	3 4	5 6 * ±	7 8	9 10 1 k * *	12 13 # ±	14 15 D #	16 17 1	10 19 3	20 21 ± 0	22 23 2 R & #	4 25 2	27 28 ± 0	29 30	31 1 * *	2 3 * ±	4 5	7 8	9 10 1 ±	11 12 E F	13 14	15 16 * *	17 16 : ± 0	19 20 2 1 × 2	22 2	24 2 2 ± 5	20 27 H ×	20 25	30 31 * ±	1 2	2 4	* *	7 8 ± 0	9 10 男 次	11 12	2 13	14 15 1 ± 0	
42	Shilong Gao	7/15	8/10	ミューオンリ ニアック (g- 2/EDM)		П	Ш	Ħ	П	Ш		Ħ	П	Ħ	П	Ħ		3	* *	* * 1		* * *			0 (1	* *	* *		* *		П	П	П	Ħ	П	Ħ	П	П	Ħ	Ħ		Ħ	П	Т	П	IT	Ħ	Ħ	Ť
75	Jesus Jimenez Zepeda	6/20	8/12	SuperKEKB RFグループ	の用中旬は開を予定 一半人の予定により、6 月の第日に変更	*	8 C	000	0 0	(((0 0 0	0 0	000	0 0	0 0	0 0 0	000	000	0 0	0 0	0 0	000	0 0	0 0	200	000	0 0	0 0	0 0	0 0	外拍車	П	П	Ħ	Ħ	Ħ	П	П	Ħ	П		Ħ	П	Т	П	П	П	Ħ	t
100	TRY RIDHO RAMADHAN	7/7	8/10	J-PARC リニ アック			П		П	П	T	П		*		:	* *	::	# # # #	* * ;	: :		::	: :	0 1	* *	# # # #		:	* *			П	П	П	П	П	П	П			Ħ			П	П	П	П	1
13	Oguz Alp Duren	6/28	8/11	ITDC		П	П	П	П	類な	0 0 0	((000	0 0	0 0	0 0 0	000	000	0 0	0 0	0 0	000	0 0	0 0	000	000	000	0 0 0	0 0 0	2 H	本典		П	П	П	П	П	П	П			П			П	П	П	П	1
53	Izzudin Ali Yefi	7/1	8/9	EF		П	П	П	П	П	10 10	000	0 0 0	((0 0	0 0 0	000	000	0 0	0 0	(() (0 0 0	0 0	0 0	0 0	0 0	000	0 0	0 0 0	本典	П		П	П	П	П	П	П	П			П			П	П	П	П	1
57	Marc Hannig	7/23	9/13	т2К				П	П	Ш		П			П			П	П	П		* *	: :	: :		* *	* *	3 3		* *	* *	* *	* *	* * :	* * s	3 3		2 2	* *	* *	* *	* *	* *	* *	* *	* *	· 🙀	П	Ī
79	Diogo Miguel Moreira da Costa	7/22	9/13	т2К				П	П	Ш	П	П			П			П	П	П		* * *	: :	: :	0 (1	* *	* *		* *	: :	* *	* *	: :	* *		1		1 1	* *	: :	* *	* *	# # % %	* *	: :	* *	日本典	П	Ī
88	Sophie McNeill	7/9	8/6	Belle II					Ш	Ш					П	0 0 0	000	0 (18	日 くり	0 0 0	0 0 (II	0 0 0	0 0 0	0 0	つくば	育りられ	000	0 0 1										П									П		I
140	Ankhbeyer Tugsseikhen	6/24	8/10	COMET					* *	* * *	* * *	* *	* *	* *			* *	* *	* *	* * :	* *	* * *	:	X X	0 (M	* *	* *		* *	*								П									П		I
158	Valeria Costa	7/2	8/9	Belle II					Ш	Ш		0 ()	0 ()	0 0	0 0	000	000	0 (18	0 0 1	0 0 0	0 0	0 0 0	000	0 0	つくば	前への	0 0 0	0 0 0	0 0 0	* *								П									П		I
177	Owaise Ahmed	7/3	8/8	СМВ					Ш	Ш		*	0 0 19	200	0 0	000	000	0 ()	5 0 M	0 0 0	0 0	0000	0 0 0	000	つくば	育への	200	0 0 0	0 0 E									П									П		I
201	Paul Florescu	6/25	8/10	COMET					集を	* * *		* *	* *	* *					* * *								* *						П		П	П		П				П					П	П	Ī
231	Syed Sibtain Ali Gillani	7/16	9/7	g-2/EDM	9(#					Ш		П			П				000	0 0 1	0 0 0 0	0 0 0	0 0 0	0 0	000	つくば	0 0 0 0 0 0	0 0 1 0 0 1	0 0 0	000	000	3 ()	0 0 (II	0 0	0 0 1 0 0 1 2 1 1 1	0 1	0 0 0	((0 0	000	0 0	000	数日間	日本興				П	I
94	Sicheng Liu	7/15	8/10	中性子	7/22-7/20就基の対象性を 3 ナー					Ш		П			П			0 ()	* *	# C	0 0 0 0	0 0 0	0 0 0	0 0	0 (M	* *	* *	8 8 1	* *																			П	I
221	XU Wenxuen	7/26	8/23	ミュオン					П	Ш					П					П			* *		0 (M	**	* *	* * ;	* *	* *	* *	**	* *	* *	* * ;	# 1 # 3		П									П		I
226	Fengyan Gu	7/15	8/10	中性子	7/19-7/22 J-PARO停電 の作的つくば前				П	Ш					П			*	* *	# # B	0 0	* * *		* *	0 ()	**	* *	* * ;	* *	* * *					Ш			П									П		I
58	Andrew Nupp	8/19	8/30	原子核実験					П	Ш					П					П								П						1	* * ;	1 1 1 1	*	# # # #	* *	*							П		I
191	Yu Yan Hin	6/24	7/19	原子核実験					0 1	* * *		* *	* *	* *		:	* *	* *	# # # #	東京								П							Ш			П										П	1
67	A Muhammed Asrul Eka Seputra	7/1	8/1	理論					Ш	Ш		((000	((0 0	0 0 0	((000	000	0 0 0	R R 0 (0 0 0	((((000	つくば		П							Ш			П										П	
109	Antonino Celderone	7/1	8/1	理論					Ш	Ш		000	000	((0 0	0 0 0	((000	000	0 0 0	R R 0 (0 0 0	((((000	つくば		П							Ш			П										П	1
180	Alison(ANDREU) Tormos Belda	7/7	8/1	理論	7/5米でSpainに用事があ るそうです		Ш		Ш	Ш					0 0	0 0 0	((000	0 0	0 0 0	R R 0 (0 0 0	((((0 0	つくば		Ш		Ш					Ш	П	П	Ш				\prod					П	Ш	

Red: Tokai Yellow: Tsukuba



Joint sessions (2 days)

- Students' presentation (self-introduction, interim report)
- Introduction of Sokendai
- Lectures (particle physics, accelerator, projects at KEK)
 - ✓ Particle physics theory lecture by Emi Kou (JENNIFER2).
- Facility tour (Tsukuba campus)
 - ✓ J-PARC tour was held in another day.
- Party







- 21 students did the research program under 15 projects (research groups).
- Final presentations were organized within the group.















- Call for KEKSSP 2025 has opened.
 - ✓ The deadline of the application is Mar 3.
- The budget will come from KEK IINAS-NX, Sokendai and JENNIFER2. The amount of the budget will be fixed in the end of March.
 - ✓ We can probably accept similar number of students in 2025.
 - ✓ Selection will be done in April.
- The format is similar to that of KEKSSP 2024.
- Some changes, improvements under discussion.
 - ✓ Some discussion on the administration.
 - ✓ Prepare of the research topics earlier.
 - ➤ Until previous time, we asked the research group to prepare the topic after students are selected.
- Probably better to move to the direction to fix the staying period of students, and this is an item to be considered in future.



Backup



Applicants in KEKSSP 2024

Country of Univ.

Brazil	2
Canada	2
China	13
Colombia	1
Ecuador	1
France	5
Germany	10
Hong Kong	2
Hungary	1
India	25
Indonesia	17
Israel	1
Italy	22
Japan	1
Jordan	2
Kazakhstan	1
Korea	4
Luxembourg	1
Malaysia	1
Mexico	3

1
1
3
2
1
4
1
6
1
3
1
6
3
15
3
9
175

Grade

2UG	9
3UG	64
4UG	37
5UG	2
M1	34
M2	21
M3	1
Graduate	3
Master	/

1st Preference

Accelerator Physics	21
Advanced Detection System	23
Elementary Particle Physics	67
Material and Life Science	19
Nuclear Physics	22
Theory (computational method in quantum field theory)	23



- Organizers (LOC): Ken Sakashita (chair), Takashi Kobayashi, SN + 7 members.
- After the applications of KEKSSP 2024 are open, we (KEKSSP) received a proposal of co-organization of KEKSSP with JENNIFER2 project.
- For KEKSSP 2024, JENIFFER2 makes financial support for 5 students from Europe.
 - ✓ Total 22 students (8 from Europe)
- We welcome for JENIFFER2 members' contributions to "common program" (e.g. lecturer).
 - ✓ The main part is scheduled on July 29 + additional days.
- Now, students are assigned to projects, and the schedule (staying period) of students are being finalized.
- We would like to make a cooperation at KEKSSP 2025.
 - ✓ I think the discussion for KEKSSP 2025 after summer this year.