



Document information

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Website of the workshop: <https://indico.inp.nsk.su/event/13/>

Agenda of the workshop: <https://indico.inp.nsk.su/event/13/other-view?view=standard>

Saturday, 26 May 2018

08:30 - 09:00	Registration	▼
09:00 - 10:30	Physics	▼
09:00	Welcome speech and status of the Super c-tau factory project 30' (Conference hall)	▼
	Speaker: Prof. Pavel Logachev (BINP)	
	Material: Slides 	
09:30	Tau physics 30' (Conference hall)	▼
	Speaker: Dr. Pablo Roig (Cinvestav)	
	Material: Slides 	
10:00	Charm physics 30' (Conference hall)	▼
	Speaker: Dr. Ryan Mitchell (Indiana University)	
	Material: Slides 	
10:30 - 10:50	Coffee break	
10:50 - 13:00	Facilities 1	▼
	<i>Collider and detector concepts</i>	
	Convener: Prof. James Lambrecht Ritman (Forschungszentrum Juelich)	
10:50	Super c-tau factory collider concept 30'	▼
	Speaker: Prof. Eugeny Levichev (BINP)	
	Material: Slides 	
11:20	Super c-tau factory detector concept 20'	▼
	Speaker: Prof. Yury Tikhonov (BINP)	
	Material: Slides 	
11:40	Beam energy and electron polarization measurement 20' (Conference hall)	▼
	Speaker: Viacheslav Kaminskiy (Budker Institute of Nuclear Physics SB RAS)	
	Material: Slides 	
12:00	Progress of Super Tau-Charm Facility (STCF) in China 40'	▼
	Speaker: Dr. Peng Haiping (USTC)	
	Material: Slides 	
12:40	The NICA experiment 20'	▼
	Speaker: Dr. Anatoly Sidorin (JINR)	
	Material: Slides 	
13:00 - 14:30	Lunch	
14:30 - 14:50	Facilities 2	▼
14:30	The KLOE2 High Energy Tagger 20'	▼
	Speaker: Dr. Francesca Curciarello (INFN Laboratori Nazionali di Frascati)	
	Material: Slides 	
14:50 - 16:10	Tracking 1	▼
	Convener: Mr. Andrey Sokolov (Budker INP)	
14:50	Inner tracker options 20' (Conference hall)	▼
	Speaker: Mr. Lev Shekhtman (Budker Institute of Nuclear Physics)	
	Material: Slides 	
15:10	The KLOE2 Cylindrical GEM Inner Tracker 20'	▼
	Speaker: Mr. Alessandro Di Cicco (INFN and Roma Tre Univeristy)	
	Material: Slides 	
15:30	The Cylindrical GEM Inner Tracker of the BESIII Experiment 20'	▼
	Speaker: Riccardo Farinelli (Ferrara INFN)	
	Material: Slides 	
15:50	Status of the micro-RWELL technology 20' (Conference hall)	▼
	Speaker: Dr. Giovanni Bencivenni (LNF - INFN)	
	Material: Slides 	
16:10 - 16:30	Coffee break	

16:30 - 18:00	Tracking 2		▼
	Convener: Mr. Andrey Sokolov (Budker INP)		
16:30	MicroMegas technology in Dubna 20'		▼
	Speaker: Dr. Dmitry Dedovich (JINR)		
	Material: Slides 		
16:50	Large Aperture Silicon Tracking Systems for NICA 20' (Conference hall)		▼
	Speaker: Dmitry Dementiev (JINR)		
	Material: Slides 		
17:10	State-of-the-art of Drift Chambers 30'		▼
	Speaker: Prof. Francesco Grancagnolo (INFN)		
	Material: Slides 		
17:40	Straw tube tracker for PANDA 20'		▼
	Speaker: Prof. James Lambrecht Ritman (Forschungszentrum Juelich)		
	Material: Slides 		
18:30 - 19:30	Excursion: Novosibirsk State University		▼
Sunday, 27 May 2018			
09:00 - 10:40	PID		▼
	<i>Particle identification for Super charm-tau factory</i>		
	Convener: Mr. Sergey Kononov (BINP)		
09:00	Status of DIRC Detectors 30'		▼
	Speaker: Prof. Jochen SCHWIENING (GSI Helmholtzzentrum fuer Schwerionenforschung GmbH)		
	Material: Slides 		
09:30	The PID detectors for PANDA using Cherenkov radiation 30'		▼
	Speaker: Dr. HAYRAPETYAN Avetik (II Phys. Inst. JLU Giessen)		
	Material: Slides 		
10:00	FARICH system for Super c-tau factory 20'		▼
	Speaker: Mr. Alexander Barnyakov (BINP, NSU, NSTU)		
	Material: Slides 		
10:20	TOF based on MRPC for MPD NICA 20'		▼
	Speaker: Dr. Vadim Babkin (JINR)		
	Material: Slides 		
10:40 - 11:00	Coffee break		
11:00 - 12:00	Calorimetry		▼
11:00	Crystal based calorimeters 20' (Conference hall)		▼
	Speaker: Boris Shwartz (Budker Institute of Nuclear physics)		
	Material: Slides 		
11:20	Pure CsI calorimeter for Super c-tau factory 20'		▼
	Speaker: Dr. Denis Epifanov (BINP)		
	Material: Slides 		
11:40	Liquids based calorimeters 20' (Conference hall)		▼
	Speaker: Dr. Vasily Shebalin (BINP)		
	Material: Slides 		
12:00 - 13:00	Magnet and muon system		▼
12:00	PANDA magnet as a prototype for Super c-tau factory 20' (Conference hall)		▼
	Speaker: Mr. Evgeniy Pyata (BINP)		
	Material: Slides 		
12:20	Thin solenoid for the CTF detector placed in front of the identification system 20' (Conference hall)		▼
	Speaker: Dr. Alexey Bragin (Budker Institute of Nuclear Physics)		
	Material: Slides 		
12:40	Belle II Muon system as an option for Super c-tau factory 20'		▼
	Speaker: Vladimir RUSINOV (ITEP)		
	Material: Slides 		
13:00 - 14:00	Lunch		
14:00 - 15:00	Excursion: BINP colliders		▼
15:00 - 15:40	Trigger & DAQ		▼
15:00	Electronics and trigger concept for Super c-tau factory 20' (Conference hall)		▼
	Speaker: Mr. Alexey Talyshev (BINP)		
	Material: Slides 		
15:20	Computing challenges of Super c-tau factory 20'		▼
	Speaker: Dr. Ivan Logashenko (BINP)		
	Material: Slides 		
15:40 - 16:40	Discussion session		▼
17:30 - 21:00	Open air dinner in the "Bylina" resort		▼

A photo from a workshop session**List of participants (affiliated with BINP are excluded)**

#	Name	Affiliation	Country
1	BERGER, Manfred	Stefan Meyer Institute	Austria
2	OLSEN, Stephen Lars	UCAS	China
3	WANG, Xiongfei	IHEP	China
4	LYU, Xiaorui	UCAS	China
5	FANG, Shuangshi	IHEP	China
6	LI, Hai-Bo	IHEP	China
7	SHEN, Xiaoyan	IHEP	China
8	ZOU, Bingsong	Institute of Theoretical Physics, CAS	China
9	PENG, Haiping	USTC	China
10	HUANG, Guangshun	USTC	China
11	TANG, Zebo	USTC	China
12	ZHAO, ZHENGGUO	USTC	China
13	YU, Fu-Sheng	Lanzhou University	China
14	WANG, Xiaolong	Institute of Modern Physics, Fudan University	China
15	ZHANG, XIAOMING	Institute of Particle Physics, Central China Normal University	China
16	YUAN, Changzheng	IHEP	China
17	BARSUK, Sergey	LAL	France
18	MA, Li	Helmholtz-Institut für Strahlen- und Kernphysik, Universität Bonn	Germany
19	MIKHASENKO, Mikhail	HISKP, Universität Bonn	Germany
20	GREENWALD, Daniel	TUM	Germany
21	LEVIT, Dmytro	TUM	Germany
22	HAYRAPETYAN, Avetik	II Phys. Inst. JLU Giessen	Germany
23	RITMAN, James Lambrecht	Forschungszentrum Juelich	Germany
24	GUO, Yuping	Mainz	Germany
25	FAEL, Matteo	University of Siegen	Germany
26	MATHUR, Nilmani	Tata Institute of Fundamental Research	India
27	GRANCAGNOLO, Francesco	INFN Lecce	Italy

28	LUSIANI, Alberto	Scuola Normale Superiore	Italy
29	DI CICCIO, ALESSANRO	INFN and Roma Tre University	Italy
30	ROIG GARCES, Pablo	Cinvestav	Mexico
31	GRELLI, Alessandro	Utrecht	Netherlands
32	WAS, Zbigniew	IFJ PAN	Poland
33	PAKHLOVA, Galina	MIPT	Russia
34	DENISENKO, Igor	JINR	Russia
35	NEFEDIEV, Alexey	LPI RAS	Russia
36	UGLOV, Timofey	LPI RAS	Russia
37	ZHUKOVA, Valentina	LPI RAS	Russia
38	DZYUBA, Alexey	B.P. Konstantinov Petersburg Nuclear Physics Institute National Research Center "Kurchatov Institute"	Russia
39	SIDORIN, Anatoly	JINR	Russia
40	KUDENKO, Yury	INR	Russia
41	PICH, Antonio	IFIC, Univ. Valencia - CSIC	Spain
42	BELYAEV, Ivan	CERN	Switzerland
43	LINSEN, Lucie	CERN	Switzerland
44	POLUEKTOV, Anton	University of Warwick	United Kingdom
45	SOKOLOFF, Michael	University of Cincinnati	United States
46	MITCHELL, Ryan	Indiana University	United States

Description

The “Workshop focusing on internationalisation and joint research for STC” was organized in the framework of the EU-funded CREMLIN project and took place on May 26th and 27th at Budker Institute. The Workshop was attended by about 25 participants from BINP, 8 from the rest of Russia, 2 from CERN and about 40 from other institutions belonging to 10 countries including China, Italy, Germany, UK, USA, Austria, Poland, Spain, Mexico, and France.

The workshop was held right after the CHARM18 international workshop that also took place in BINP. The CHARM18 workshop provided a comprehensive discussion of the SCT physics case and a good background for the follow-up workshop. Some participants took part in both CHARM18 and the follow-up workshop.

The workshop provided an excellent overview of the state-of-the-art particle detection technologies. All talks are available on the [workshop indico page](#). The workshop gave particle detector experts and particle physicists an opportunity to meet each other and to discuss ways for future joint research and development activities. Particularly, two groups from INFN have expressed interest in participating in R&D for inner tracker and drift chamber for SCT detector. Discussion of a formal agreement for these activities is underway between BINP and INFN management.

On the same dates, the first meeting of the SCT international advisory committee (IAC) was held in BINP. The IAC is composed of leading experts in particle physics and detector technologies:

1. Dr. GRANCAGNOLO, Francesco (INFN Lecce, Italy)
2. Prof. KUDENKO, Yury (INR, Moscow, Russia)
3. Dr. LINSEN, Lucie (CERN, Switzerland)

4. Prof. LUSIANI, Alberto (Scuola Normale Superiore, Italy)
5. Dr. MITCHELL, Ryan (Indiana, USA)
6. Prof. PENG, Haiping (USTC, Hefei, China)
7. Prof. PICH, Antonio (IFIC, Univ. Valencia - CSIC, Spain)
8. Prof. RITMAN, James Lambrecht (Juelich, Germany)
9. Dr. ROIG GARCES, Pablo (Cinvestav, Mexico)
10. Prof. WAS, Zbigniew (IFJ PAN Cracow, Poland)
11. Prof. YUAN, Changzheng (IHEP, Beijing, China)
12. Prof. ZHAO, Zhengguo (USTC, Hefei, China)
13. Dr. SEFKOW, Felix (DESY, Germany) (Dr. F. Sefkow was not able to attend the first IAC meeting)

The first IAC meeting resulted in a document with recommendations for the SCT project. The recommendations are supposed to help in establishing the strategic approaches for successful development of the SCT project.

Several priorities for the application of the efforts were identified during the workshop discussions and communication with the IAC members. Among them:

- Broad simulation effort for the experiment at this stage of the SCT project;
- Setting up a preliminary, but clear project management structure; regular meetings of the SCT detector working groups (WGs) and active formation of international expert groups involved in the WGs;
- Establishing a detailed roadmap towards finalization of the detector CDR and TDR;
- Providing a good visibility of the SCT project in the particle physics and accelerator communities.

The workshop and the first IAC meeting are considered as a step towards establishing an international collaboration around the SCT detector.

Media coverage

BINP press release was published on May, 24th on the BINP web site (newest results on FARICH subsystem for SCT detector was described and the first SCT IAC Meeting was announced):

<http://inp.nsk.su/press/novosti/1931-fokusiruyushchij-aerogel-pomozhet-raspoznat-chastitsy-v-budushchikh-eksperimentakh>

Briefing for the media was organized in the first day of workshop, on May, 26th. Seven Russian media participated in the briefing. Speakers participated:

Pavel Logachev – BINP director;

Lucie Linssen – CLIC team leader, CERN, member of SCT IAC

Yury Kudenko - Institute for Nuclear Research of the Russian Academy of Sciences, leading researcher, member of SCT IAC

As a result of the BINP press release and the briefing for the media, in total about 70 news articles and 2 TV spot were issued in Russian media (all – in Russian); 4 selected links to articles and 2 links to TV spots are presented below.

News articles about FARICH system:

<https://nplus1.ru/news/2018/05/24/aerogel>

<http://www.interfax-russia.ru/Siberia/news.asp?id=936429&sec=1671>

News articles about the SCT workshop:

<http://www.interfax-russia.ru/Siberia/news.asp?id=937026&sec=1671>

<https://tayga.info/140697>

TV spots:

http://www.nsktv.ru/news/technology/razrabotku_novosibirskikh_uchenykh_otsejili_fiziki_so_vseg_o_mira_260520181422/

http://www.nsktv.ru/news/technology/sozdanie_novogo_kollaydera_v_novosibirske_budet_kurirov_at_mezhdunarodnyy_komitet_280520181847/