

Task 5.1 Status

Vitaly Vorobyev

2nd general WP5 meeting

September 28, 2020



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Task 5.1 timeline status

Task	Subtask	Subtask leader	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
5.1. Internationalization and visibility	Plenary talk on SCT at CHARM20	Vitaly Vorobyev												
	Workshop on future SCT factories	Vitaly Vorobyev												
	Public SCT webpage development	TBD												

1. CHARM20 new dates: from May the 31st to June the 4th, 2021
2. Workshop on future super charm-tau factories
 - online only and significantly shortened, scheduled on November 2020
3. Public SCT webpage
 - Subtask leader: V.V.
 - Details: below

Task 5.1 Milestone

- M18: Kick-off meeting of collaboration around the SCT detector
 - Can be held within one of the following general WP5 meetings
 - Dedicated formal steps are to be discussed. BINP management is to decide.
 - Collaboration constitution?
 - Spokesperson(s)?
 - Institutional board?

Recent SCT publications

1. A. Bondar *et al.* «*Measurement of the weak mixing angle at a Super Charm-Tau factory with data-driven monitoring of the average electron beam polarization*», [JHEP 2020 \(2020\) 76](#)
2. V.L. Ivanov *et al.* «*Simulation of the CsI crystal calorimeter of the detector of charm-tau factory in Novosibirsk*», [JINST 15 \(2020\) C07026](#)
3. DIRC2019 proceedings
 - M. Schmidt *et al.* «*DIRC options for the Super Charm Tau Factory*» [JINST 15 \(2020\) C02032](#)
 - A.Yu. Barnyakov *et al.* «*Overview of PID options...*», [JINST 15 \(2020\) C04032](#)
4. INSTR20 proceedings
 - V. K. Vadakepattu *et al.*, «*Time Projection Chamber as Inner Tracker for Super Charm-Tau Factory at BINP*», [JINST 15 \(2020\) C07021](#)
 - L. Shekhtman, «*New simulations of physics background in Super Charm-tau factory...*», [JINST 15 \(2020\) C06005](#)
 - ...
5. Session-conference of the Nuclear Physics Division of the Russian Academy of Science
 - 10-12 March 2020 <https://indico.inp.nsk.su/event/26/>
 - Many contributions from SCT. Proceedings to be published in Russian
6. ...

Snowmass 2021: SCT Lol

- «Precision experiments at Super Charm-Tau Factory»
[RF/SNOWMASS21-RF1 RF7 BINP-019.pdf](https://www.snowmass21.org/RF/SNOWMASS21-RF1_RF7_BINP-019.pdf)
- Signed by 117 colleagues from 37 organizations
- We are invited to present the LOI for the Topical Group RF7 «Hadron Spectroscopy» on October 2nd, 2020
- Next step: writing white paper
 - Probably together with Chinese colleagues

Precision experiments at Super Charm-Tau Factory Letter of Interest for Snowmass 2021

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Public SCT website

- Notes on SCT webpage from Feb 20th, 2020 discussion:
 - News [should be published on the website]
 - Simple explanations of physics and technology behind SCT
 - Identify useful parts of existing web sites <https://ctd.inp.nsk.su> and <https://leptoncolliderplatform.web.cern.ch>
 - Create a new web page, focused on SCT only
 - Among others, the new web page shall contain useful information/explanation on SCT for the public (general public and general physics community) -> develop one of these or create new website?
 - The problem of maintenance of the resource
 - 3-5 min video with simple explanation of SCT? Difficult and expensive task. Suggestions are very welcome

Public SCT website

- Option I: to order website design and development
 - Good quality of back end and front end
 - Expensive
 - Detailed specification must be prepared
 - Does not solve the problem of content production and maintenance
- Option II: to develop a new website by ourselves
 - Quality is not guaranteed, *miser pays twice*
 - A small internal team should be formed
 - First working version can be done quickly

Public SCT website: option II

- Back end: Django + Postgresql
- Front end:
 - HTML, CSS
 - BootstrapCDN?
- Server administrators
 - Andrey Suharev (BINP)
 - Alexey Buzykaev (BINP)
- Developers:
 - V.V.
 - ???
- A one-weekend prototype:
 - <https://super-charm-tau.herokuapp.com>

The screenshot displays the website for the Super Charm-Tau Factory Project. The main header includes navigation links for Home, Internal, Blog, Wiki, and Cremlinplus, along with Register and Login options. The main content area features a 'Project introduction' button and a 'Cremlinplus WP5 description' section. This section lists six tasks (Task 5.1 to Task 5.6) related to internationalization, collider technologies, software development, and development tasks. Below the tasks is a 'WP5 Deliverables' table:

#	Month
D5.1	18
D5.2	24
D5.3	24

The 'Cremlinplus WP5 consortium' section lists five member institutions with their logos and names: BINP (Budker's Institute of Nuclear Physics), CERN (European Organization for Nuclear Research), INFN (Istituto Nazionale di Fisica Nucleare), JLU (Justus Liebig University Gießen), and IJCLab (Le Laboratoire de Physique des 2 Infinis Irène Joliot-Curie). The footer contains copyright information (© 2020 BINP), a Terms of Use and Privacy Policy link, the CREMLIN PLUS logo (funded by the European Union's Horizon 2020 programme), and a funding acknowledgment: 'This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 871072'.

Public SCT website: content

1. Video

- Promotional SCT video: single high-quality video
- SCT physics: short video series
- SCT technology: short video series
- Student-oriented: short video series

2. Text-based

- News
- Interviews with SCT people (~1 per month)

3. WP5 section

- Description of the WP5 tasks
- WP5 event announcements and reports
- Personal pages of the colleagues involved in WP5 (who do not mind) (?)

4. Documents DB

- Publications
- Formal agreements, memorandums etc.
- etc.

Public SCT website: conclusions

- Server for the new website is almost ready – not an issue
- The biggest challenge is creating regular content
 - Video:
 - BINP and Novosibirsk State University video production team (2021-2022 active production process)
 - ?
 - Text:
 - BINP physicists with support of the BINP PR division (2020-...)
 - ?