

Minutes, Phys/PubCom, January 24, 2022

Update PubCom composition

Six new members started their term in the PubCom. We welcome Maria Doncel Monasterio, Mark Lattery, Guangshun Huang, Sean Dobbs, Markus Moritz, and Piotr Salabura. An overview was given of the objectives and tasks of the PubCom in connection to the ones of the PhysCom. Details can be found in the attached slides. The following links are useful for new members to take a look at:

<https://panda-wiki.gsi.de/foswiki/bin/view/PubCmt/WebHome>

<https://panda-wiki.gsi.de/foswiki/bin/view/PhysicsCmt/WebHome>

Please let the physics coordinator know if you cannot get access these pages.

50 years QCD review paper

The physics coordinator received a request from Eberhard Klempt (Jan. 2, 2022) to contribute to a foreseen review article in view of the 50 yrs celebration of QCD. The wish is to get such article published in EPJC by the end of the year. The editors are Eberhard Klempt and Franz Gross. PANDA is invited to contribute to chapter 12, "The Future" with about 8 pages. The PANDA management endorsed this initiative. More details can be found in the attached slides, including an overview of the foreseen structure of the paper. One important discussion item that came up during a phone conversation between the physics coordinator and Eberhard Klempt is whether it would make sense to extend "our" contribution to future perspectives of QCD at FAIR, hence including both PANDA and CBM. Given the structure of the paper, it was agreed upon that this would make sense. Piotr Salabura will contact the HADES/CBM spokespersons to discuss this matter and ask for a name as contact person from HADES/CBM side. Once this is settled, the physics coordinator will communicate with Eberhard Klempt and also ask to extend the number of pages if CBM will be included. Moreover, a restructuring of chapter 12 will be discussed among all the convenors of that chapter together with the editors.

Status report of PWG

The convenor of EMP PWG, Alaa Dbeyssi will step down in August 2022 and proposes to nominate Stefan Diehl from Giessen to eventually take over the position. Up till August, he would then co-convene with the help of Alaa and together with Anna Skachkova the EMP activities. The Pub/PhysCom endorses this proposal. Alaa will also make this proposal to the whole EMP PWG.

Software priorities

The following wiki page provides an overview of the present software priorities, wishes, and struggles:

<https://panda-wiki.gsi.de/foswiki/bin/view/PhysicsCmt/AnalysisSoftwarePriorities>

During the meeting, the various points were addressed. Three general aspects came up during the discussion, namely

- 1) The strong wish to setup QA macros representing the analysis of various PWG as important quality benchmark. A framework for this is already in place in PandaROOT and the convenors were ask to discuss input for this during the PWG. The charmonium(like)/exotic/light/... PWG recently discussed this item and various proposals were made. In order to keep up the momentum, it was proposed to organise an internal workshop among representatives of the various PWG and the computing coordinators to discuss the technical details. For this QA workshop, the following persons will be contacted to take part: Aaron Kripko, Jennifer Regina, Jennifer Puetz, someone from the EMP PWG (checked with Stefan Diehl). Further details will follow and will be organised by the physics and computing coordinators.

- 2) The tutorial macros need an update. Klaus Goetzen has been asked to take this up and he has agreed to do so.
- 3) A new release of PandaROOT is expected to be available the earliest in the middle of 2022. The release will also include more realistic track finding algorithms that are suited for hyperon studies and major updates on the EMC geometry and reconstruction. In the development branch these updates will be available sooner and the physics group are welcomed to take a look at that in the mean time.

Any Other Business

The question came up whether the next PANDA collaboration meeting will be in-person or via Zoom. The spokesperson has so far not communicated this aspect to the collaboration. He will be asked by Lars Schmitt to do so.

Johan Messchendorp (physics coordinator), January 26, 2022

Agenda



- ✓ Update PubCom composition
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PubCom composition, 2022

2022 composition

Ex-officio members

- Johan Messchendorp (Chair)
- Frank Nerling (Deputy Chair)
- Ulrich Wiedner (PANDA Spokesperson)
- Frank Goldenbaum (CB chair)
- Carsten Schwarz (SC chair)

Members

Welcome

- Maria Doncel Monasterio (1st year)
- Mark Lattery (1st year)
- Guangshun Huang (1st year)
- Sean Dobbs (1st year)
- Markus Moritz (1st year)
- Piotr Salabura (1st year)
- Stefano Spataro (2nd year)
- Roman Dzhygadlo (2nd year)
- Michael Papenbrock (2nd year)

PubCom activities

'Short-term' objective: towards Phase Two program

'Mid-term' objective: physics book and related articles

'Long-term' objective: quality publications of PANDA data ;-)

1. Participate in “Zoom” meetings Pub+PhysCom (Mondays 15:00, ~monthly).
2. Define & update publication policies.
3. Discuss & address bottlenecks in review processes.
4. Setup practical guidelines for authors and reviewers.
5. Taking part in review committees.
6. Any initiative from your side is welcome!



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50 years of QCD, review paper

- **Recent (Jan 2, 2022) invitation by Eberhard Klempt**

- Foreseen review paper in EPJC “50 years of Quantum Chromodynamics”.
- Editors: Franz Gross and Eberhard Klempt.
- Request to contribute to “**chapter 12, The Future**”.
- Request for **~8 pages** (min 4 - max 10) on perspectives of PANDA or FAIR physics.
- Review style, level suitable for PhD students
- Foreseen deadline **15th of July, 2022** (to get it published by end of year).
- Focus on “*what we will learn from future experiments?*”.
- Overleaf soon available.
- PANDA management endorses this initiative!

- **Questions to address**

- What about extending to future perspectives of QCD@FAIR?
- Which physics potentials to highlight in article?
- Structure of the text? According to our pillars, or phases, or beams, or ...?
- Who can contribute from PANDA (and beyond)?
- Organization? Zoom discussion foreseen with other convenors of chapter 12.

50 years of Quantum Chromodynamics (#27 - 1/23/22)

Franz Gross and Eberhard Klempt(eds.)

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Abstract A short review of the developments in QCD since the 1971 conference, with the goal of giving advanced Ph.D. students a broad background to prepare them for current research.

Names in black text have accepted

Names in green text have been asked

Names in italic are under consideration

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Software priorities

- ***From our last meetings:***

- Interaction computing group and PWGs
- => Keep up list of software struggles (PWG)
- => Define list of software features (PWG)
- => Setup priorities (PubPhysCom+CompC)
- => Search for/allocate human resources (CB)

=> Common wiki page:

<https://panda-wiki.gsi.de/foswiki/bin/view/PhysicsCmt/AnalysisSoftwarePriorities>

Software priorities

Some general observations from last meeting

1. Most of the requests have low priority and ask for add-ons/features that in principle are no showstopper.
2. Several software features have already been implemented, but due to lack of communication missed.
3. The most urgent software features are related to track finding (hyperon program).
4. Realistic track finding algorithms to be available in next release.
5. Communication among PWGs and software groups important to avoid/clarify many issues.
6. Request to PWGs: *provide QA macros* for your physics channels!!



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