

The PUNCH4NFDI Consortium

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1. News and Highlights

On 7 November 2022, as part of the Berlin Science Week, NFDI4DataScience held the **2nd NFDI Science Slam**. The winner was David Ohse, who contributes to TA7 WP3 “Public outreach”. David convinced the audience with his slam about “Research data management in middle-earth”. Congratulations, David. All contributions to the Science Slam are now available on YouTube¹.

In consequence of the proposal of the Women4PUNCH group at the last meeting in September 2022, the PUNCH4NFDI management has taken action and published **Recommendations to minimize the unconscious bias in hiring processes**². We ask all participants to take these recommendations into account in order to support female candidates.

PUNCH4NFDI young scientists meetings: a virtual coffee break for early-career scientists (students, PhDs, Postdocs) in the consortium has been initiated alongside a dedicated mailing list. The meetings will take place every one to two months in order to foster informal discussions between young scientists. Furthermore, events and programs for the PUNCH Young Academy are in planning and will start this year.

The **5th PUNCH4NFDI General Meeting** took place as virtual meeting on 17 January 2023. The slides are available in indico³. External guests at the meeting were Astrid Schneidewind and Bridget Murphy (DAPHNE4NFDI) and Hans-Rainer Klöckner (SKA Regional Center).

In case you have news that you want to share with PUNCH4NFDI, don't hesitate to send a mail to info@punch4nfdi.de. You can access all newsletters on our web site⁴.

2. NFDI and related topics

Base4NFDI: The proposal for Base4NFDI will be funded. The first call for proposals for basic services ended on 15 February. The following proposals were submitted and are now under review by the consortia:

- Service for Data Management Plans
- Harvesting and Findability Enhancing Services
- Identity and Access Management
- Knowledge Graph Infrastructure
- Persistent Identifier Services
- Terminology Services

Further information about Base4NFDI is available on www.base4nfdi.de.

¹ <https://www.youtube.com/playlist?list=PL766zD6HYeC8Fz10mUAHxCVAfwLqky3MT>

²

https://www.punch4nfdi.de/sites/sites_custom/site_punch4nfdi/content/e111577/e116817/e117405/infoboxContent188993/PUNCH-recommendations_published.pdf

³ <https://indico.desy.de/event/36387/>

⁴ https://www.punch4nfdi.de/news_amp_events/newsletter/

NFDI sections and task forces: The work in all sections and task forces is progressing.

- The task force “Monitoring” presented the white paper “Interim Report Reference” to the NFDI Konsortialversammlung. This paper should form a basis for the mid-term reports of all consortia towards the DFG.
- The task force “Monitoring” will continue operation as task force “Evaluation and Reporting” and work in close collaboration with the NFDI directorate in view of the upcoming evaluation of NFDI as a whole.
- A new task force “User Research” has been established and a first meeting took place in early 2023. Furthermore, the establishment of a section “Industry Engagement” is under way.

3. Formal, legal and financial topics

The postponement of funds (“Mittelübertrag”) from 2022 to 2023 was fully approved by the DFG. As most positions are filled by now, we expect the amount of underspent funds to further decrease with time.

This year, the term for the spokesperson “gemäß Satzung” and his/ her deputy for PUNCH4NFDI will end and elections have to be held. Currently, the positions are filled by Thomas Schörner (spokesperson, DESY) and Susanne Pfalzner (deputy, FZJ). We are preparing the elections for fall 2023. In view of these elections, we are also preparing the admission of Participants into the “Konsortium gemäß Satzung” which are members of the NFDI e.V. but not yet members of PUNCH4NFDI in the sense of “Konsortium gemäß Satzung”.

4. Status of the consortium

Reporting in PUNCH4NFDI

Recently, the fourth quarterly report has been published internally. A new section to report on in-kind resources has been added to the document.

We consider these reports as valuable and helpful in the preparation of the mid-term review which we have to hand in to the DFG in 2024. Future quarterly reports will be adapted where necessary in order to include suggestions and definitions from the white paper “Interim Report Reference” from the task force Monitoring.

New people

New people who contribute to the work programme of PUNCH4NFDI are our most valuable asset! In this category of the newsletter, we try to give short introductions of newcomers to the consortium – welcome to everybody!

Michael Zacharias (University Heidelberg, TA6): I studied physics in Bochum, Germany, and obtained my PhD with a topic on theoretical astrophysics under the supervision of Prof. Reinhard Schlickeiser in 2013. Since then, I've had postdoc positions in Heidelberg (Germany), Potchefstroom (South Africa), Bochum (Germany,

acting as replacement professor for a few months), and Meudon (France). I have recently returned to Heidelberg to continue my work on astrophysical objects, as well as PUNCH4NFDI. Next to theoretical studies, I analyze and model data obtained with various observatories around the world.

Michael Wigard (WWU, TA2 & TA6): I did my MSc in Physics at the University of Münster (WWU), where I worked on modeling the electric field inside a dark matter detector, using Monte Carlo methods to estimate model parameters from observed calibration data. I've always been passionate about programming and technology and their potential to transform our society. Recently I've been hired by the WWU to work on its own JupyterHub and to contribute to PUNCH in the areas of TA2/TA6 and I am looking forward to working with all of you. Contact: michael.wigard@uni-muenster.de



Tanumoy Saha (HTW, TA5): I have recently graduated with a Ph.D. in Physics, received from the University of Münster (WWU) from CiM-IMPRS graduate school. I'm working full-time now at HTW Berlin, with Prof. Hermann Heßling as a software developer on developing a scalable software solution to analyze/detect interesting interstellar radio signals. To start with right now I am involved in developing a python package for generating digital twins of interstellar pulsar radio signals, that will be used later as a training dataset to identify/track interesting signals. In the context of PUNCH4NFDI, I am part of TA5 (WP 4). Contact: Tanumoy.Saha@HTW-Berlin.de

Baida Achkar (Goettingen, TA7.1, TA2.2, TA6.5): I received my PhD in neutrino physics from the university Joseph Fourier Grenoble I – France in 1992. Then I worked as associate professor and head of physics department at Damascus University - Syria. In 2017 I joined the LHC-ATLAS team at Georg-August University in Goettingen where I contributed to the cross section measurement of the top anti-top pair production at 13 TeV and was involved in the upgrade of the pixel detector for the HL-LHC activities. In December 2022 I joined the PUNCH4NFDI consortium. In this context I am involved in TA7.1 focusing on the education/training of the early-stage PUNCH scientists. My contribution to the TA2.2 and TA6.5 is related to the integration of the GoeGrid ATLAS-Tier2 computing resources to access the CERN open data by non-CERN affiliated users.





Nicolas Baron-Perez (UHH, TA3): I recently started my PhD at the Hamburg observatory and am happy to be part of TA3-WP3. Within this, I will work at astrophysics and machine learning interface. Before moving to Hamburg, I did my master's and bachelor's in physics at the University of Munich. My master's thesis at the Max Planck Institute for extraterrestrial Physics and the Arnold Sommerfeld Center dealt with galaxy cluster mass estimation with machine learning methods. My bachelor's thesis at the Max Planck Institute for Physics was in theoretical cosmology. Contact: nicolas.baron.perez@hs.uni-hamburg.de

Nandini Suvvi Neelakantiah (DESY, TA2): I joined in January 2023 for PUNCH4NFDI TA2 tasks - Data Management and will mainly be involved in building the necessary data lake infrastructure needed for PUNCH4NFDI compute storage. I have completed my masters in Hochschule Mittweida, Germany in Applied Mathematics in Data science and Networks. Previous to that I have completed my Bachelor of Engineering in Information science and have worked in many multinational companies as Data warehouse developer, Software engineer and Data Engineering field.



5. Communication and collaborative tools

For the better integration of new people into the consortium, an on-boarding guide is now available in the intranet⁵ with a detailed five-point plan on “first steps” and general information, e.g. on available mailing lists.

6. Upcoming events and excitements

- The next **Consortium Board** meeting will take place on 1 March 2023⁶
- On 2 March 2023 at 14:30 PUNCH4NFDI will host the **NFDI Physical Sciences Joint Colloquium**⁷. Ian Bird will give a virtual talk on “Exascale-era data challenges in Physics & Astronomy”.
- The second **TA2 face-to-face workshop** takes place in Göttingen on 9-10 March⁸ with hands-on tutorials and a following social event.
- PUNCH4NFDI participates in the **ISC 2023 Exhibition**⁹ on 22 - 24 May 2023. In addition to two research posters that were submitted together with partner with FIDIUM, we also participate as exhibitors in cooperation with FIDIUM and the LHC ErUM-FSP office.
- **Save the date:** 6th PUNCH4NFDI General Meeting on 13 June 2023 (virtual)

⁵ <https://intra.punch4nfdi.de/files/home/PUNCH4NFDI-onboarding-guide.pdf>

⁶ <https://indico.desy.de/event/38002/>

⁷ <https://indico.desy.de/event/38068/>

⁸ <https://indico.desy.de/event/37911/>

⁹ <https://www.isc-hpc.com/overview-exhibition.html>

- A complete list of PUNCHLunches can be found in the intranet and in Indico: <https://indico.desy.de/category/743/>). If you have suggestions for the seminar series – let us know at info@punch4nfdi.de.
- For a complete list of TA and other working meetings, see the Indico category <https://indico.desy.de/category/741/>

7. Recent talks, results, and publications

To be found at least partly on the web page and in ZENODO (<https://zenodo.org> – just search for “PUNCH4NFDI” or – if you are interested in the broader scope – “NFDI”).

- Toolbox for Science Communication¹⁰
- MRHS multigrid solver for Wilson-clover fermions¹¹
- The international Lattice Data Grid — towards FAIR data¹²
- A Workflow Management System Guide¹³
- List of simulation codes in Astrophysics¹⁴
- Recommendations to minimize the unconscious bias in hiring processes¹⁵

¹⁰ <https://zenodo.org/record/7342908#.Y9ez2qfMJH4>

¹¹ <https://arxiv.org/abs/2211.13719>

¹² <https://arxiv.org/abs/2212.08392>

¹³ [arxiv:2212.01422](https://arxiv.org/abs/2212.01422)

¹⁴ <https://go.fzj.de/astro-codes>

¹⁵ [PUNCH-recommendations.pdf](#)