

Survey on experimental nuclear physics. NUPECC, Debrecen, 1-6-2023

1 Task Force

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2. Survey proposed by NuPECC committee.

Agreed in the meeting in Ljubljana on 16-17 march 2023, agreed to perform a survey of activities in Experimental Nuclear Physics in the NuPECC member states.

Results of the survey will also contribute as one of the important ingredients to the NuPECC 2024 Long Range Plan.

The methodology is similar to the recent NuPECC survey of nuclear theory

https://nupecc.org/snt/meissner_sep21.pdf .

3 Data Collection:

3.1 Who?

The **national representatives** of NuPECC, which include the members of the task force, will be in charge of collecting the information for each country.

The national representatives will contact a **key person in each research institution** (universities, laboratories, etc), to complete the relevant table with numbers (not names). They should ensure that the data are completed on time.

The key person for each research should fill a 6x6 table, with the relevant numbers, as described below. The template for this table is enclosed.

3.2 What data?

- List of research institutions or universities per country, with key person (to be compiled by national representatives).

- 6x6 table per institution. The 6 columns correspond to the professional status, separated by gender (Staff M, Staff F, Postdoc M, Postdoc F, PhD M, PhD F). The columns correspond to the main area of research (NSR, NAP, HIP, HAD, SYM, APP).

- All data relevant are shown in the google spreadsheet

https://docs.google.com/spreadsheets/d/1ISU0kBH_pVQFHpZV2E2CxapvjHIJHxpkJ9a8aO3HYEI/edit#gid=0

There is a spreadsheet per country with a page per research institutions.

NSR: Nuclear structure and reactions

NAP: Nuclear astrophysics

HIP: Heavy Ion Physics. Strongly interacting matter under extreme conditions.

HAD Hadron physics

SYM Nuclei as laboratories/symmetry tests

APP Applications of nuclear science.

The numbers included in the table should be integer, and reflect the main area of research of each researcher.

The sum of all the numbers in the table should be equal to the number of researchers in the institution.

4 Nuclear Experiment. Who counts for this survey?

However, the key persons/ national representatives are not expected to ask each person. They can rely on relevant listings or other criteria they consider adequate to produce the numbers.

4.1 According to the research activities.

- 1) Can your research activity be broadly defined as Experimental Nuclear Physics?
- 2) Can your research activity be broadly defined as experimental, and belonging to the areas: Nuclear structure and reactions; Nuclear astrophysics; Heavy Ion Physics; Hadron physics; Nuclei as laboratories/symmetry tests; Applications of nuclear science ?
- 3) In case that your research is cross-disciplinary, would you consider that it falls mainly within the scope of the international organization NuPECC (nuclear) , rather than ECFA (particles) or APECC (astro-particles) ?
- 4) In case that your nuclear physics research is related to the applications, do you consider yourself as a nuclear physicist who makes applications, rather than a medical physicist, solid state physicist, etc, which eventually uses nuclear techniques in the research ?
- 5) In case that your nuclear physics research involves both theory and experiment, is experiment the most significant? (Researchers known to be included in the previous theory survey should not be counted here).

4.2 According to the professional status.

This survey will consider the researchers employed, enrolled, or linked to research institutions. The personnel of private companies should not be included in this survey, with the exception of those linked to a research institution, and performing significant research.

PhD students should have at least a BSc or an MSc, and be enrolled in a PhD program.

Post docs include researchers having a PhD with any type of contract which is not indefinite, including tenure track.

Staff should include researchers with a permanent position in the research institution. Emeriti performing significant research (in the view of the key person) should be counted as staff.

5. Deadlines:

- National representatives identify key persons in research institutions, contact them, and produce a list of research institution and key persons: 20 May 2023.
- Key person to provide table from each research institution: **30 June 2023.**
- National representatives compile national results: **15 July 2023.**