

APS

Advancing Physics

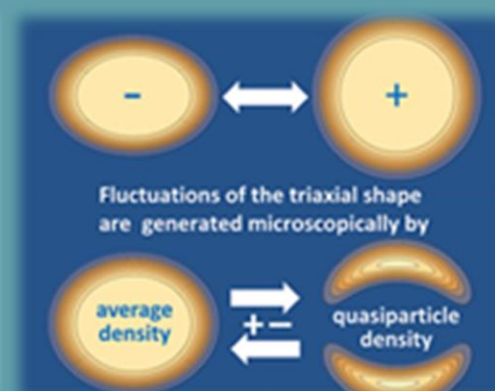
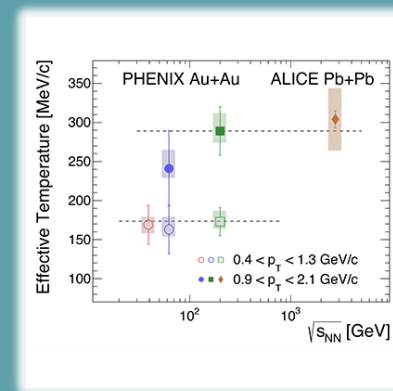
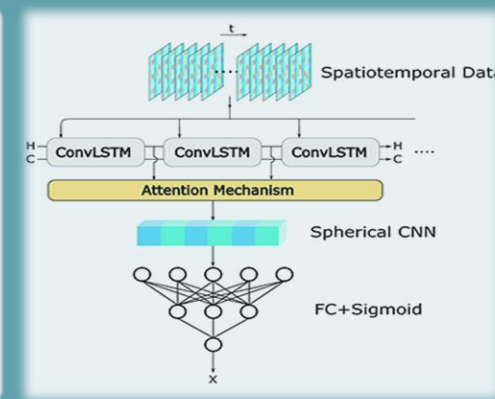
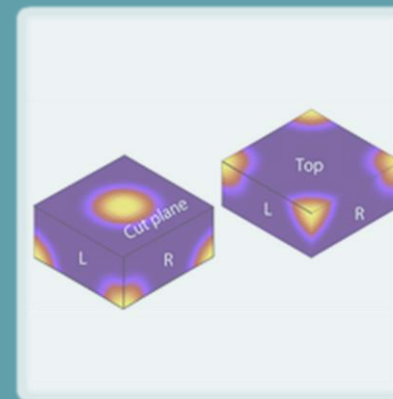
Physical Review C

A Physical Review journal with a large community following and a large heart.

An Inside Perspective

Joe Kapusta, Chief Editor

60'th Karpacz Winter School on Theoretical Physics
Wilhelm and Else Heraeus Physics School





PRC Characteristics

Values

Trusted

Responsive

Authentic

Community-connected

Transparent

Practices

- Customer-oriented
- Professional and Caring
- Demanding and Nurturing

Editors

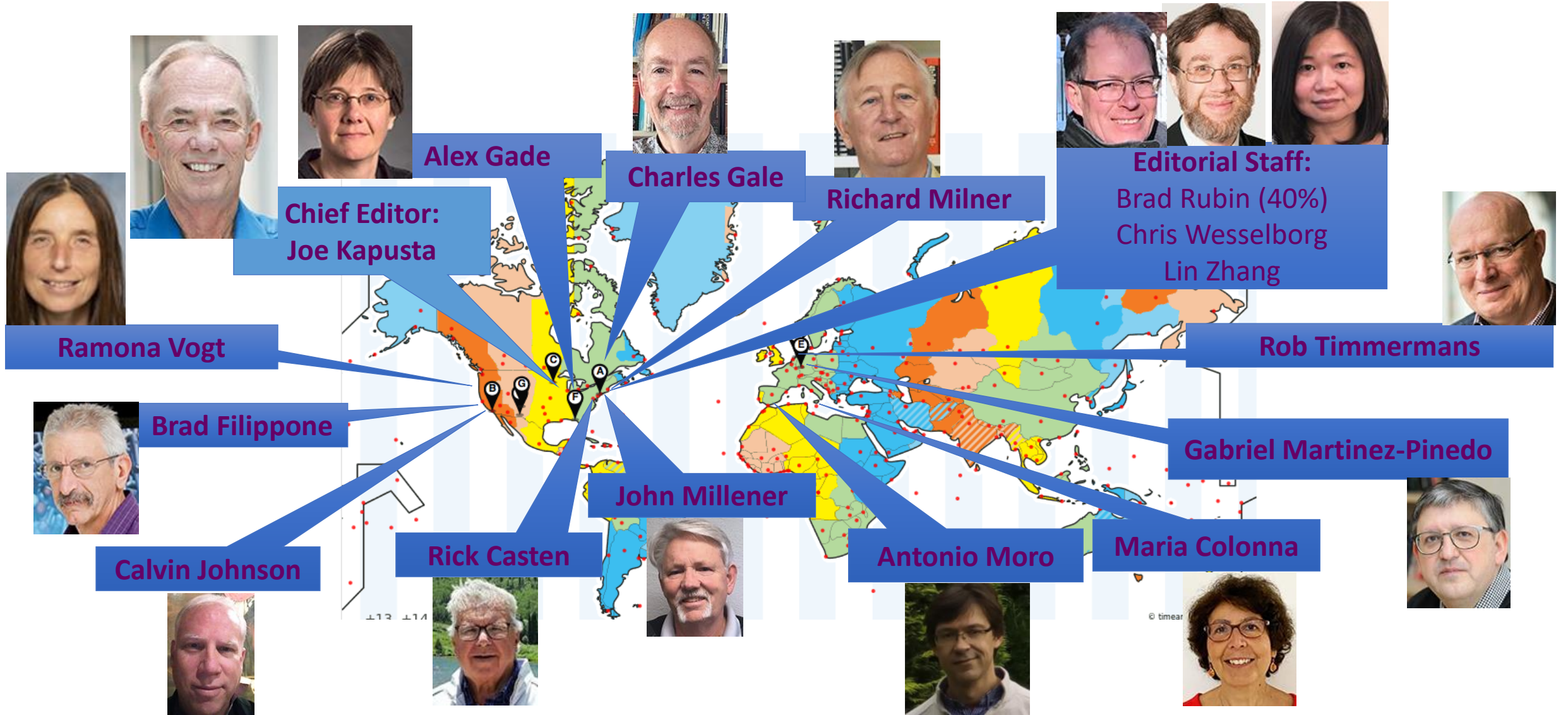
[Journals.APS.org/prc/staff](https://journals.aps.org/prc/staff)

- 13 part-time academic editors
- 2.4 full-time APS editors (one shared with PRFluids)
- 15 Editorial Board Members

Supported by a shared Journal Operations Team and Database.



PRC Editors: 8 US, 1 CA, 4 Europe; 2.4 APS





2024 PRC Editorial Board

Terms ending 31 Dec. 2024

Stephane Goriely
(U Libre, Bruxelles)—Th

Kouichi Hagino
(Kyoto U, Japan)—Th

Roy A. Lacey
(SUNY, Stony Brook)—Ex

Scott Pratt
(Michigan State U)—Th

Ingo Wiedenhöver
(FSU)—Ex

Terms ending 31 Dec. 2025

David J. Dean
(JLab)—Th

Alessandra Fantoni
(INFN, Frascati, Italy)—Ex

Susan Gardner, (Univ.
Kentucky, Lexington)—Th

Or Hen
(MIT)—Ex & Th

Adam Maj (Polish
Acad. of Sci., Poland)—Ex

Terms ending 31 Dec. 2026

Catherine M. Deibel
(Louisiana State U)—Ex

Nicole d'Hose
(CEA Saclay)—Ex

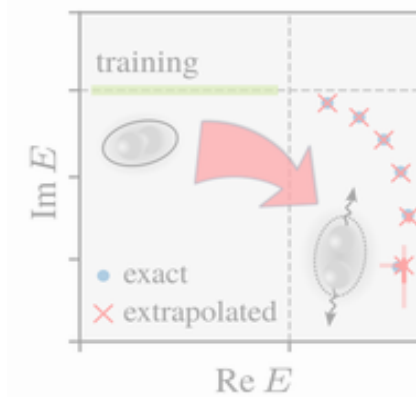
Bernard Pire
(Centre Physique Théorique,
École Polytechnique, France)—Th

Sofia Quaglioni
(Lawrence Livermore Nat. Lab.)—Th

Piet Van Duppen
(KU Leuven, Belgium)—Ex

- 3-year terms
- Roles as per editorial policies
 - Review PRC author appeals (first of two appeal layers)
 - Review PRC Comments as identified referees
- Other advisory roles, at the Editor's discretion (policies, adjudication, guidance)

See journals.aps.org/prc/staff#edboard



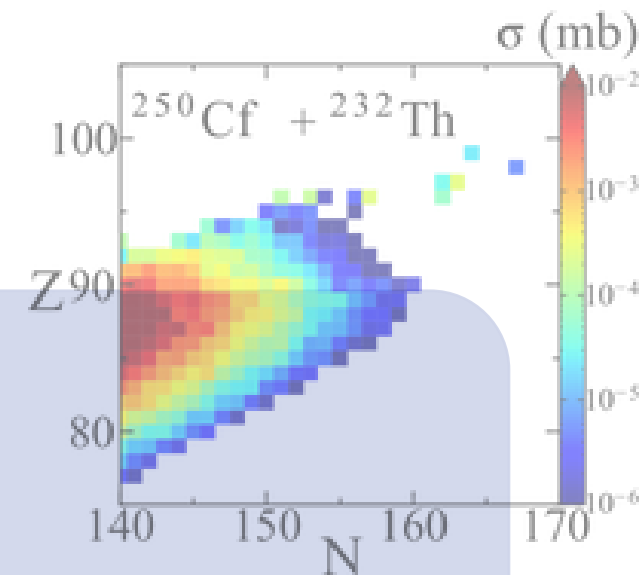
PRC Features

Common APS Journal Features

- Letters
- Regular Articles
- Editors' Suggestions
- Editorial process, including grievance resolution (appeals; Comments & Replies)

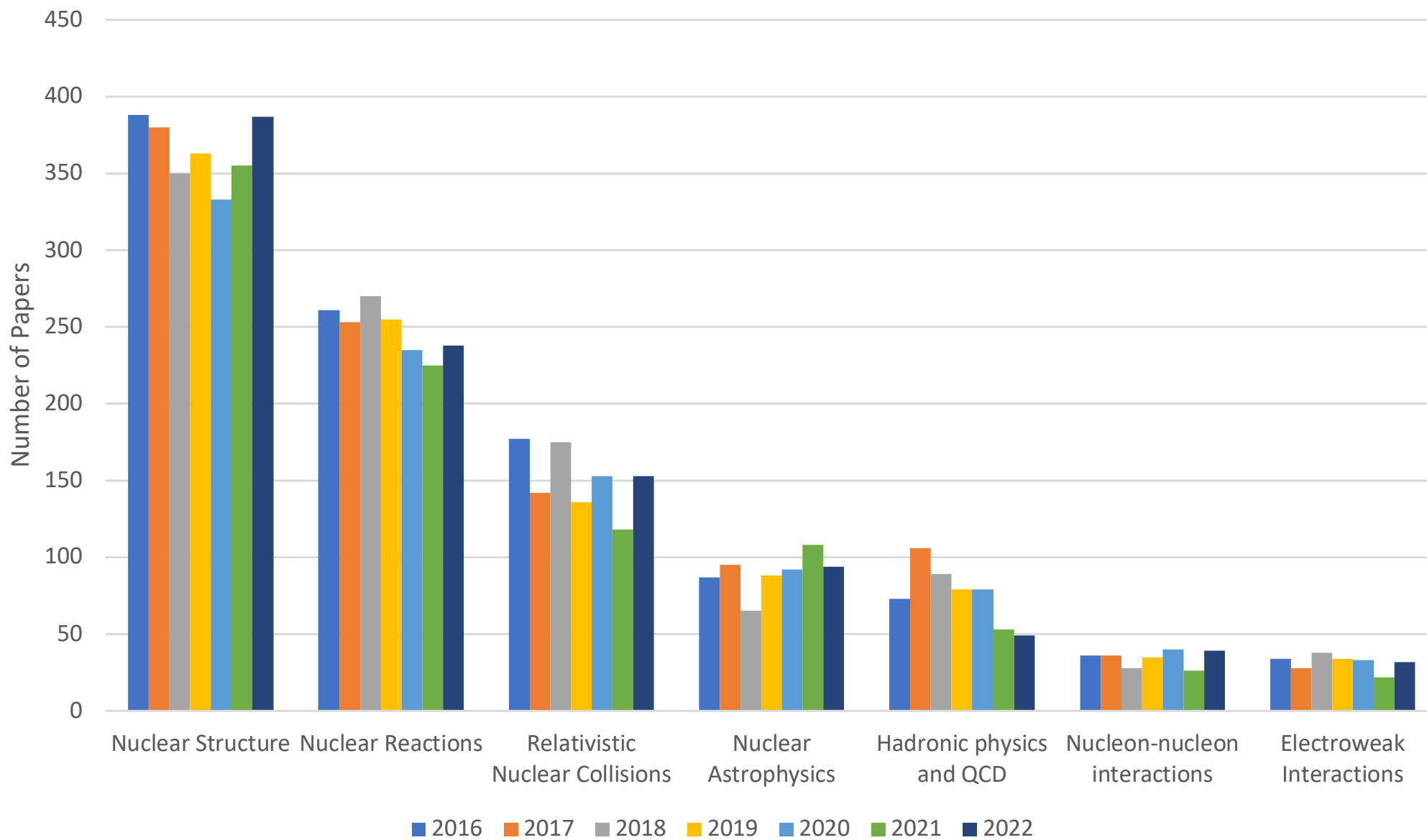
Specific PRC Features

- Structured Abstracts
- Milestone Instrumentation Papers
- Quality Control for spectroscopic data (consistency checks by nuclear data scientists, in partnership with BNL NNDC)

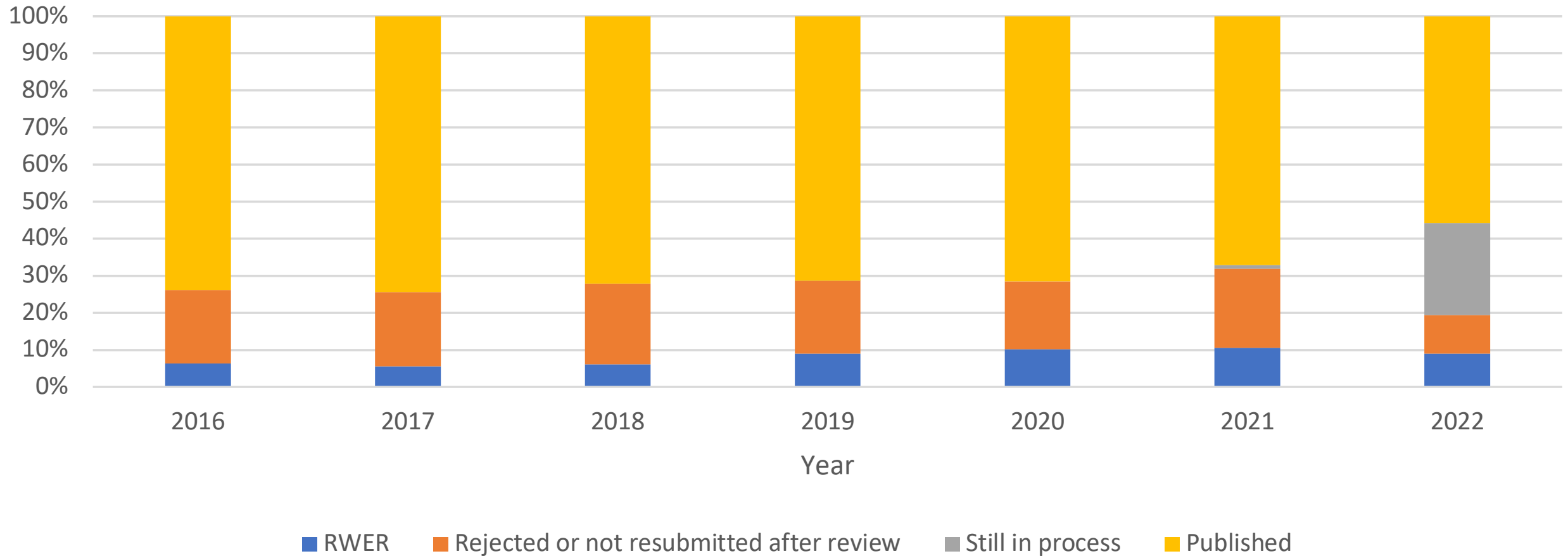




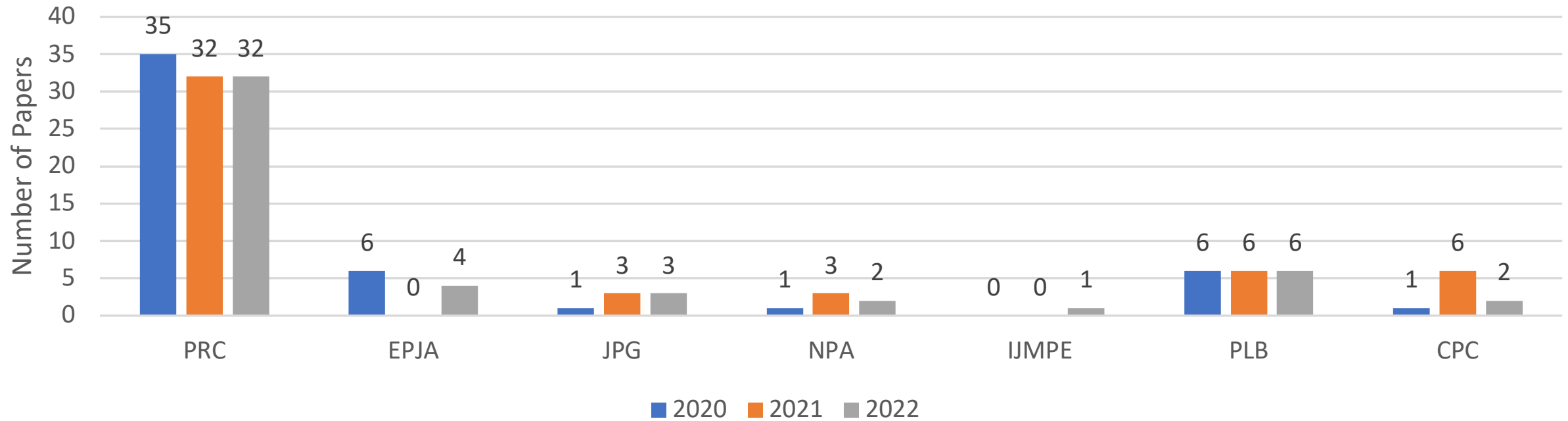
Publication of Research papers in PRC Sections by Year 2016-2022



Fate of PRC Submissions

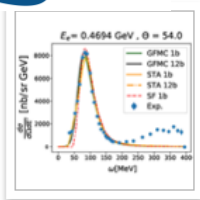


Number of papers among top 50 cited nuclear physics papers from 7 journals

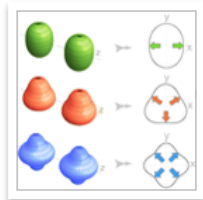


PRC Highlights Gallery 2022

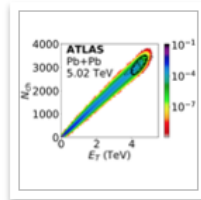
[Journals.APS.org/prc/highlights](https://journals.aps.org/prc/highlights)



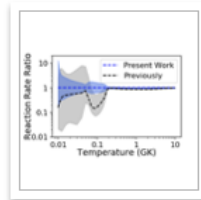
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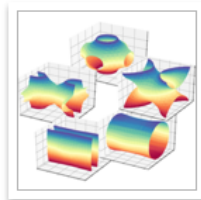
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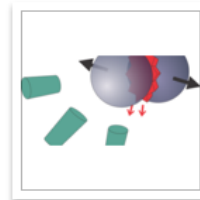
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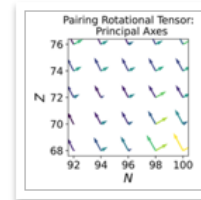
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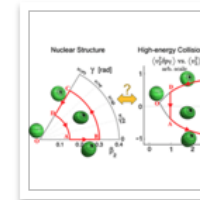
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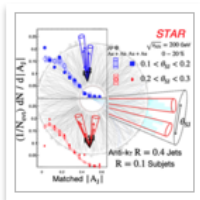
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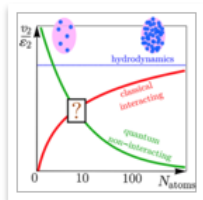
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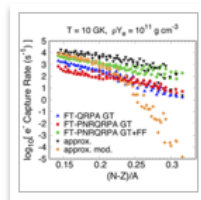
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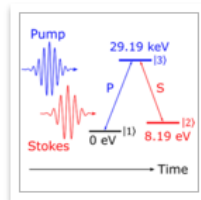
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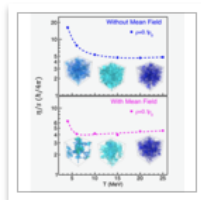
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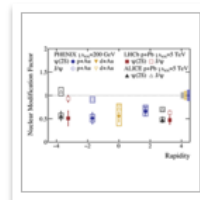
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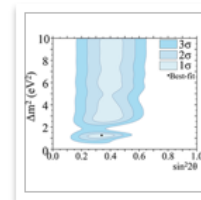
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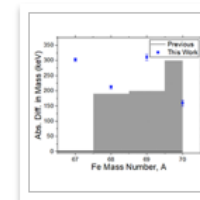
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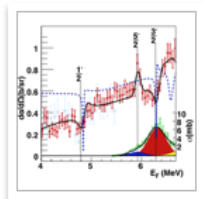
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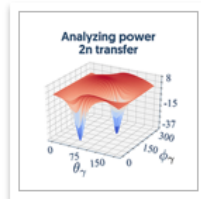
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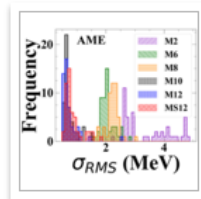
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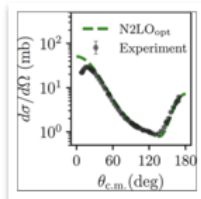
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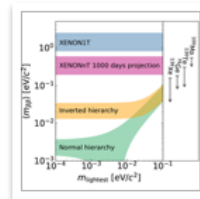
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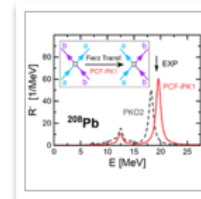
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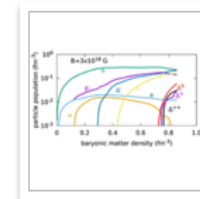
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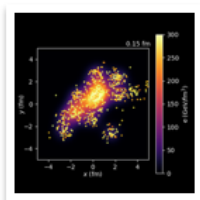
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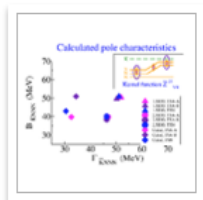
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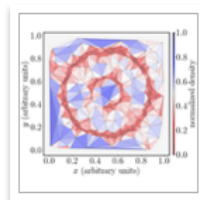
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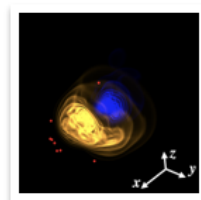
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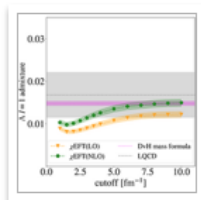
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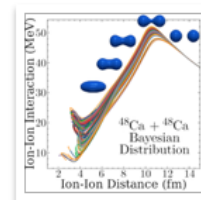
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PhysRevC.106.L031301.png



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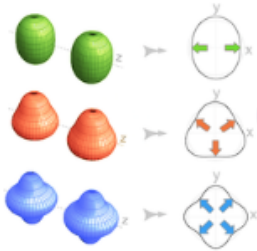
Editors' Suggestion

12 citations

Shape of atomic nuclei in heavy ion collisions

Jiangyong Jia

Phys. Rev. C **105**, 014905 (2022) – Published 5 January 2022



The author presents compelling arguments that measurements of collective flow in high-energy nuclear collisions can provide information on the shape of atomic nuclei on time scales several orders of magnitude shorter than are probed in low-energy experiments.

Editors' Suggestion

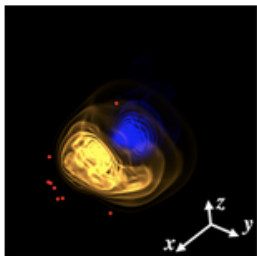
Letter

2 citations

Bulk medium evolution has considerable effects on jet observables

Yasuki Tachibana, Chun Shen, and Abhijit Majumder

Phys. Rev. C **106**, L021902 (2022) – Published 26 August 2022



Collisions of heavy ions at relativistic energies produce strongly interacting matter in a state of high energy density, known as the quark-gluon plasma. Such events also produce energetic QCD jets that will interact, excite, and probe the plasma before being measured by the surrounding detectors. Using numerical modeling, this paper shows that the reconstructed jets have the potential to distinguish among different possible flow patterns of the underlying strongly interacting hadronic fluid.

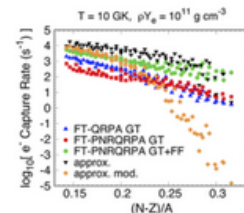
Editors' Suggestion

5 citations

Finite-temperature electron-capture rates for neutron-rich nuclei near $N = 50$ and effects on core-collapse supernova simulations

S. Giraud, R. G. T. Zegers, B. A. Brown, J.-M. Gabler, J. Lesniak, J. Rebenstock, E. M. Ney, J. Engel, A. Ravlić, and N. Paar

Phys. Rev. C **105**, 055801 (2022) – Published 4 May 2022



Electron capture on neutron-rich nuclei near $N = 50$ plays an important role during the gravitational collapse of massive stars prior to a supernova explosion, as neutrinos emitted in the electron-capture process can freely leave the stellar core. At the high temperatures in the stellar core the electron-capture rates are determined from thermally excited states whose properties differ from those of the ground state. The authors perform finite-temperature calculations with different theoretical approaches and use the resulting electron-capture rates as input in core-collapse supernova simulations. This work shows that the various sets of electron-capture rates lead to very small differences in the simulations suggesting that the rates are well-constrained.

5 citations

Featured in Physics

Letter

First experiment at the Super Heavy Element Factory: High cross section of ^{288}Mc in the $^{243}\text{Am} + ^{48}\text{Ca}$ reaction and identification of the new isotope ^{264}Lr

Yu. Ts. Oganessian *et al.*

Phys. Rev. C **106**, L031301 (2022) – Published 29 September 2022

Physics Synopsis: [Super Heavy Element Factory Releases First Results](#)





Peer Review Process

Upon submission a non-physicist staff member assigns the manuscript to an appropriate handling editor. It goes into the task queue of that editor.

The handling editor may suggest it be rejected without review for various reasons. Otherwise it is sent to a referee, based on their knowledge and expertise, chosen from a huge database common to all APS journals.

If a referee report is received, the handling editor may accept the paper or send it back to the authors to address the comments and criticisms. If a report is not received it is sent to another referee. This process continues.

If the first referee does not recommend publication after 2 or 3 rounds the paper is usually sent to a second referee (unless a fatal flaw is identified in the paper). After 1 or 2 rounds with the second referee, the handling editor either recommends publication or rejection.

A rejection may be appealed. An appeal goes to an Editorial Board member who makes a signed recommendation to the Chief Editor. If this appeal fails, it can be appealed to the Editor in Chief. The Editor in Chief makes a final decision, based not on physics but on whether due process was followed.



Peer Review Process

What Can I Do To Speed the Acceptance and Publication of My Paper?

How are Referees Chosen?

Can I Suggest Individuals to Referee My Paper?

Can I Exclude Individuals from Reviewing My Paper?

How Many People Review My Paper?

Can I Request a Second Referee?

Can a Referee Reject My Paper?

What Should I Do When I Get a Referee Report Criticizing My Paper?

Why Does the Referee Ask Me to Cite so Many Papers?

How Do I Become a Referee?



What Can I Do To Speed the Acceptance and Publication of My Paper?

First, spend the time and effort to write a paper that is clear and grammatically correct. You might want to consider asking someone else to proofread your paper before submission. This is a good idea in any case!

Second, if you receive a referee report requesting changes do your best to respond to ALL of the points raised and detail the changes made in your manuscript in your letter of resubmission. Take the comments and criticisms of the referee very seriously. The referee is most likely one of your most interested readers after all.

Third, statistics show that the longest delay is associated with the response time of the author(s). If you desire your paper to be published rapidly after you receive a referee report, respond to it quickly but accurately.

Finally, please be kind enough to send in your referee reports on another author(s)'s paper as quickly as you would wish them to review your own.



How are Referees Chosen?

The Chief and Associate Editors are active researchers. They have access to a database of referees containing thousands of people which is common to Physical Review A-E, Letters, and other Physical Review journals from which one or more may be chosen. There is no border in this database between different areas of physics. Referees are chosen based on many factors including their area of expertise and availability (a referee is not available if they are currently reviewing or have recently reviewed another manuscript).



Can I Suggest Individuals to Referee My Paper?

You most certainly can! In fact, it helps the editors for you to suggest knowledgeable individuals. However, people generally will not be selected if they are at the institution of one of the authors, if they have been a frequent co-author in the past, if they are currently reviewing another manuscript, or if they have been overworked in the past year as a referee. Therefore, it is useful to suggest many possible reviewers, not just one or two. Ten is not too many!



Can I Exclude Individuals from Reviewing My Paper?

You may request that certain individuals not review your paper. You do not need to give an explanation for why. However, if your paper is criticizing another paper the handling editor may solicit a signed report from one of the authors of that paper. Depending on the report, the editor is likely to send it to an anonymous referee afterwards.



How Many People Review My Paper?

Usually only one person is chosen to review a paper. However, if your paper negatively comments on another published paper an author of that paper may be asked to provide a signed Advisory Opinion (not anonymous). If the first referee is tardy a second referee may be chosen and, in some cases, two reports are then received. If an impasse is reached between you and a referee another one may be selected to bring the refereeing process to a conclusion.



Can I Request a Second Referee?

Yes; see the FAQ above. Generally, this request will be granted only if the handling editor feels that an impasse has been reached. Oftentimes it is better to continue to resolve the issues with the first referee.



Can a Referee Reject My Paper?

No. Only the Editor or an Associate Editor can reject your paper after an appropriate reviewing process has been completed.



What Should I Do When I Get a Referee Report Criticizing My Paper?

Read the referee report carefully and dispassionately. Put yourself in the position of a reader. Is what you are presenting clear, unambiguous, logical, and well written? If you can respond positively to ALL the comments, suggestions, and criticisms of the referee then you should resubmit your paper with an explanation of all the changes made. If you cannot then you need to do more research or else drop the project and start another one. Oftentimes the author(s) misread the referee report. What may at first seem like a devastating blow is really a request for more information or a more detailed explanation. Other times the referee has indeed found a fatal flaw in the research. We all learn from our mistakes. Do not take it personally.

Even if you think the referee is mistaken, other readers might likewise be confused and this can signal that it would be useful to alter your explanations in the paper. One aim of the referee process is to improve papers. Answers from authors directed solely to the referee that are not reflected in changes to the paper are not useful to readers.



Why Does the Referee Ask Me to Cite so Many Papers?

Not only is it ethically necessary to cite previous work on the topic of your research but it displays your knowledge of the subject, and it helps the less knowledgeable reader to learn the history of the subject. It has been found that researchers in physics typically cite fewer paper than researchers in other areas of science. Not only does citing more papers properly assign credit where it is due but it also helps you to get more citations for your own papers!



How Do I Become a Referee?

When your adviser or mentor is asked to review a manuscript, ask them to ask you to draft a first report. They should review your report and discuss and refine it with you. Then it should be submitted as a joint report. Your contact information and areas of expertise should be included. That information will be added to the database. You may then be asked in the future to act as an independent referee.