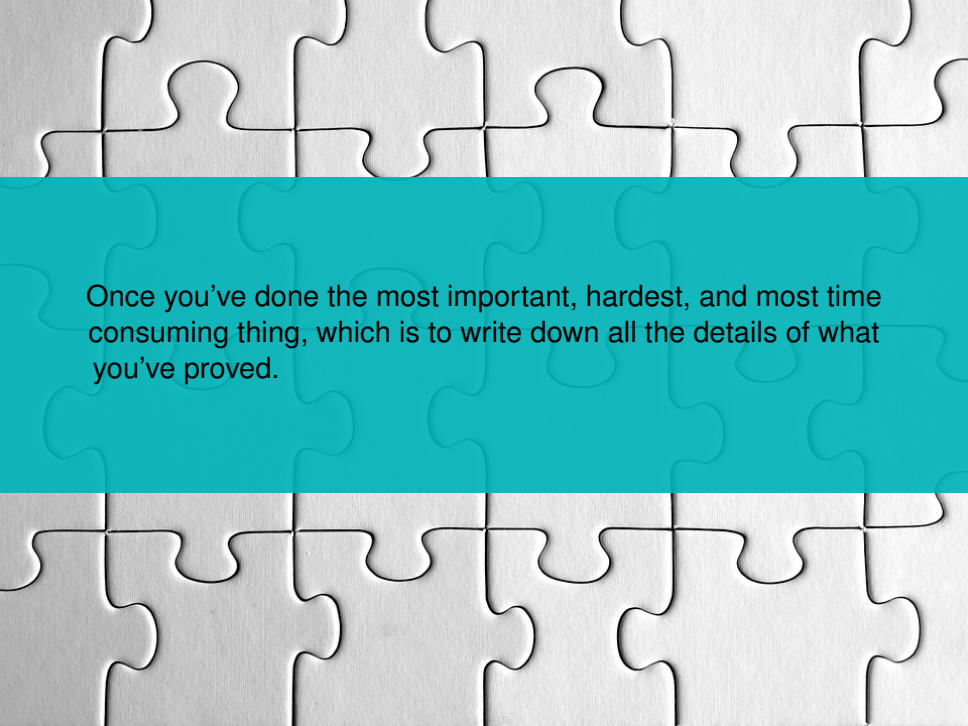


Writing up your work and submitting it to a journal

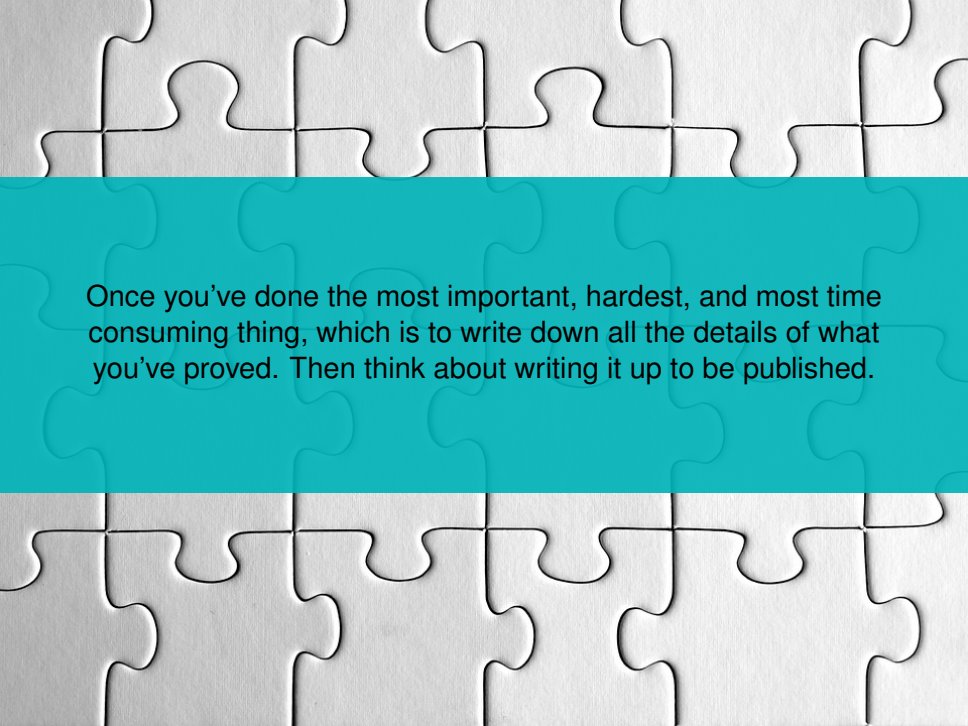
Angela Gibney • UGA • angela.gibney@gmail.com

This talk is aimed at graduate students who are starting to think about how to plan to write up their work for publication. Obviously, what I say here is my own opinion on this topic, and probably a lot of people out there would give you other advice.

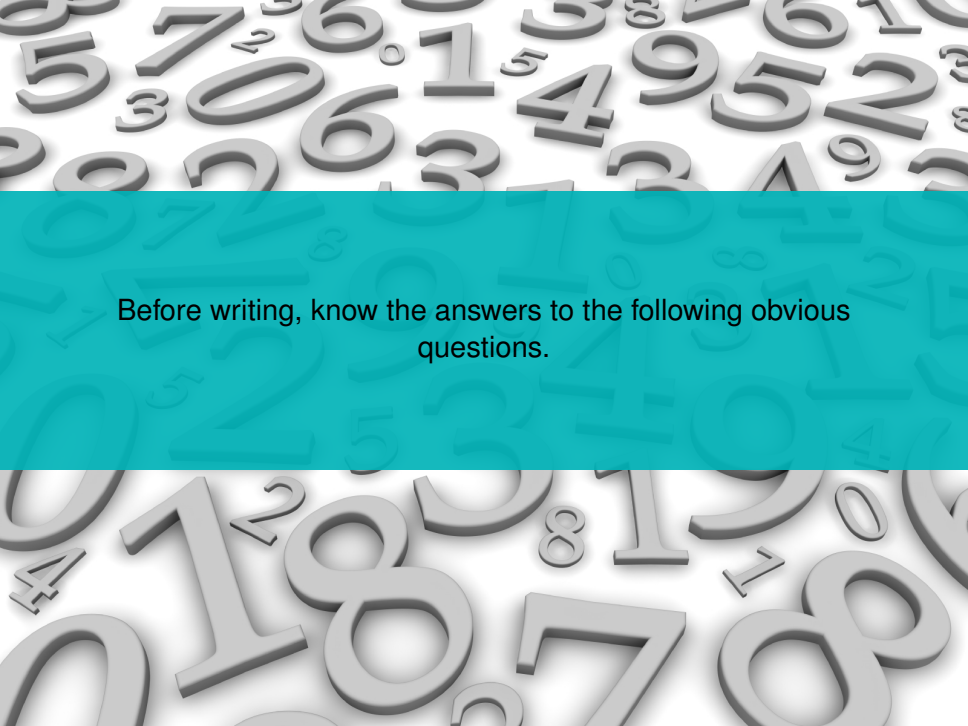
This talk is aimed at graduate students who are starting to think about how to plan to write up their work for publication. Obviously, what I say here is my own opinion on this topic, and probably a lot of people out there would give you other advice. I wish I could say I followed my own advice all the time.



Once you've done the most important, hardest, and most time consuming thing, which is to write down all the details of what you've proved.



Once you've done the most important, hardest, and most time consuming thing, which is to write down all the details of what you've proved. Then think about writing it up to be published.

The background of the slide is a light gray surface covered with numerous 3D-rendered numbers (0-9) of varying sizes and orientations. Some numbers are in sharp focus, while others are blurred in the background, creating a sense of depth. A solid teal-colored rectangular box is centered horizontally and vertically, containing the text.

Before writing, know the answers to the following obvious questions.

Before starting, you will want to know your paper's content:

- What is your paper going to be about?

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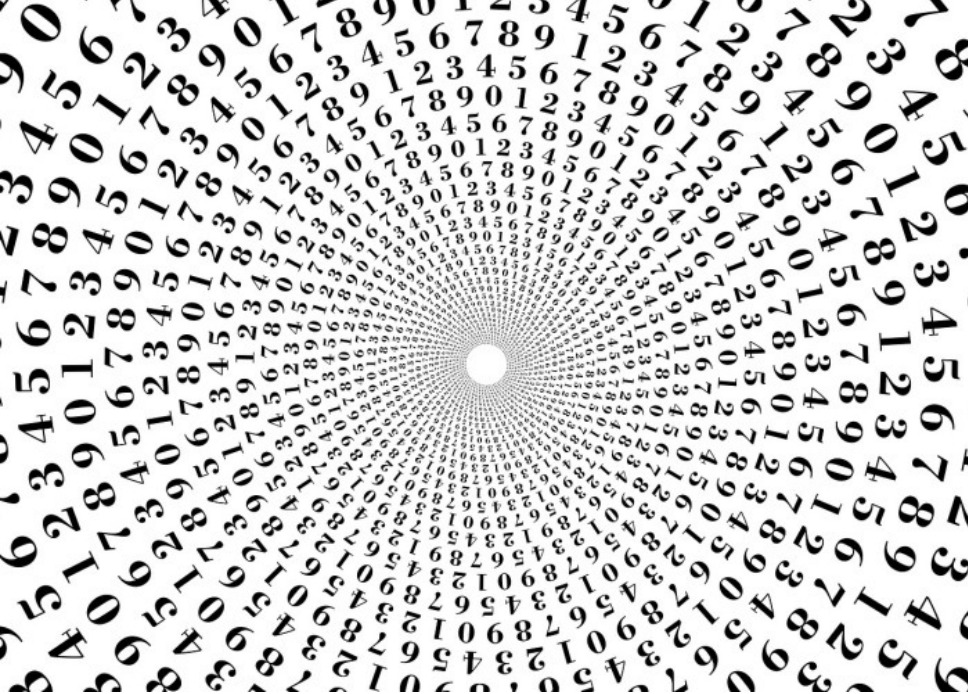
- What is your paper going to be about?
 - What are your main results?

Before starting, you will want to know your paper's content:

- What is your paper going to be about?
 - What are your main results?
 - What are your applications?

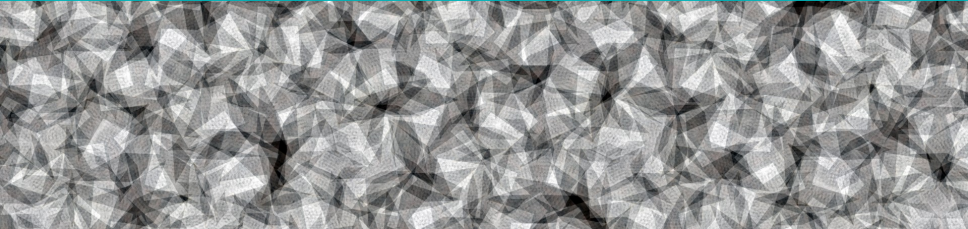
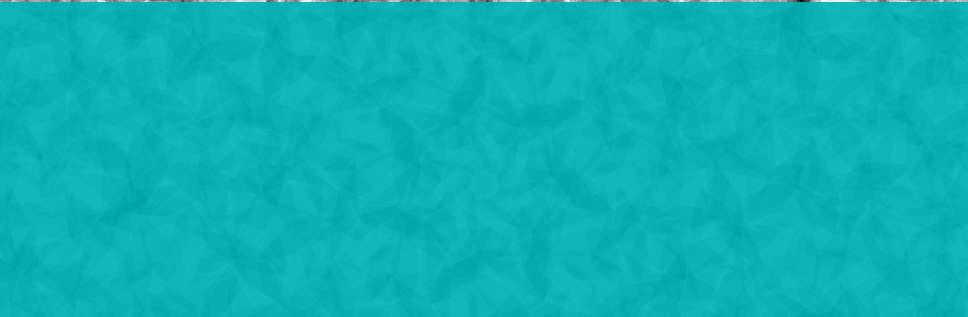
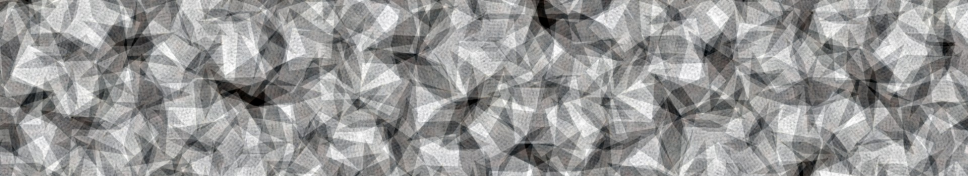
Before starting, you will want to know your paper's content:

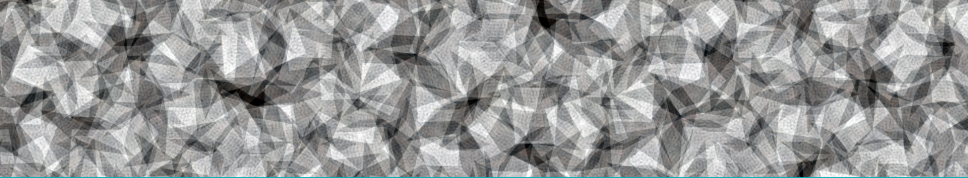
- What is your paper going to be about?
 - What are your main results?
 - What are your applications?
- What examples do you want to include?



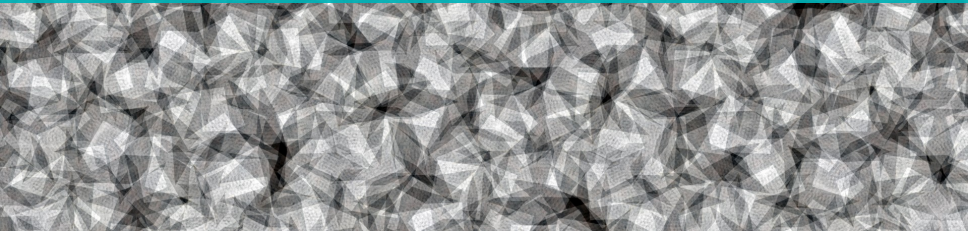


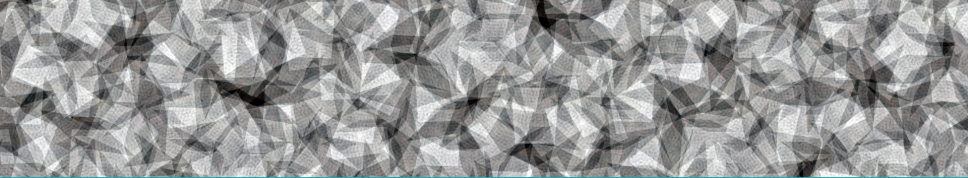
HOW TO GET STARTED?



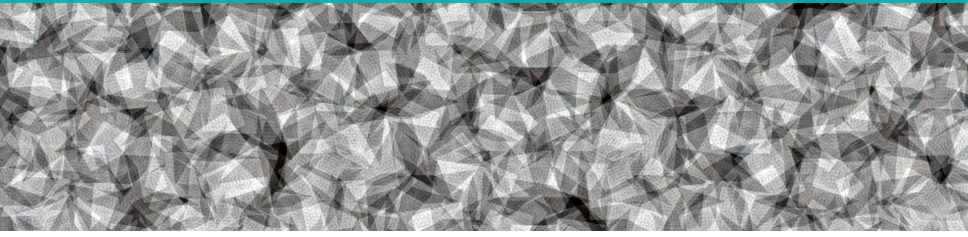


You need to formulate your results to best feature what you have done and optimize a check that you did it correctly;





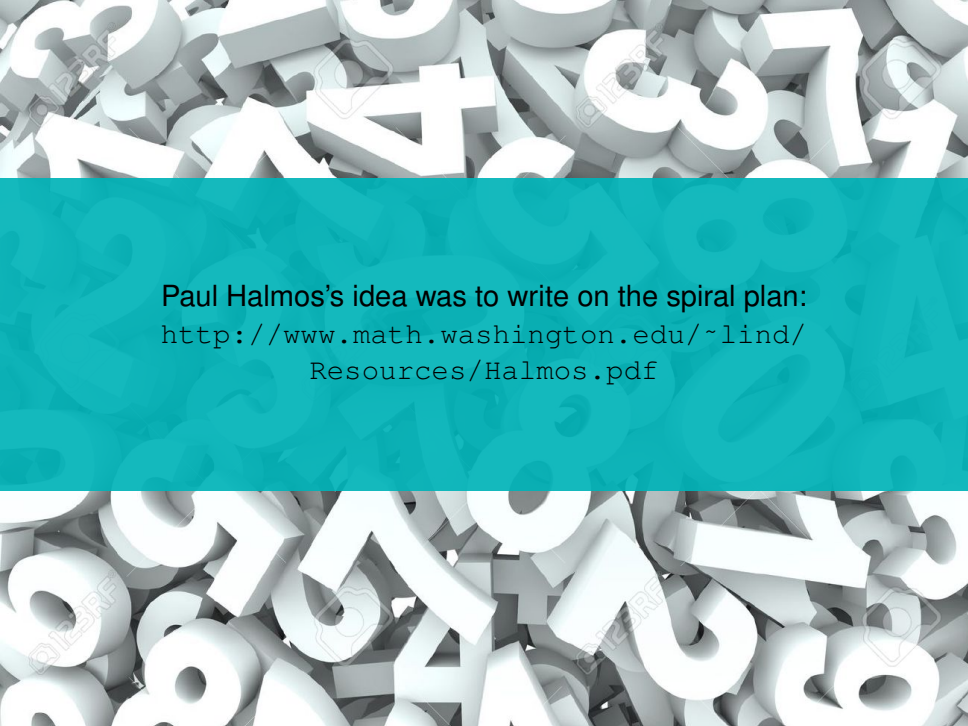
You need to formulate your results to best feature what you have done and optimize a check that you did it correctly; and you need to sell these results to the world.



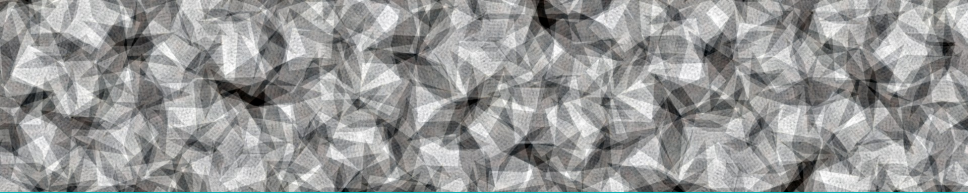
The background of the slide is composed of a dense, overlapping field of 3D-rendered white numbers (0-9) and symbols. A solid teal rectangular box is centered horizontally and vertically, containing the text. The numbers are scattered across the entire slide, appearing both above and below the teal box.

I like Terry Tao's idea of starting with a rapid prototype:

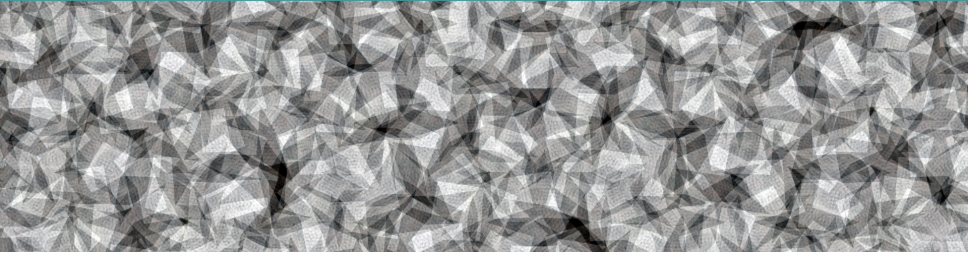
[https://terrytao.wordpress.com/
advice-on-writing-papers/
write-a-rapid-prototype-first/](https://terrytao.wordpress.com/advice-on-writing-papers/write-a-rapid-prototype-first/)

The background of the slide is composed of a dense field of 3D-rendered white numbers (0-9) of various sizes and orientations, creating a textured, isometric effect. A solid teal-colored horizontal band spans the width of the slide, positioned in the middle. Centered within this band is the text.

Paul Halmos's idea was to write on the spiral plan:
[http://www.math.washington.edu/~lind/
Resources/Halmos.pdf](http://www.math.washington.edu/~lind/Resources/Halmos.pdf)

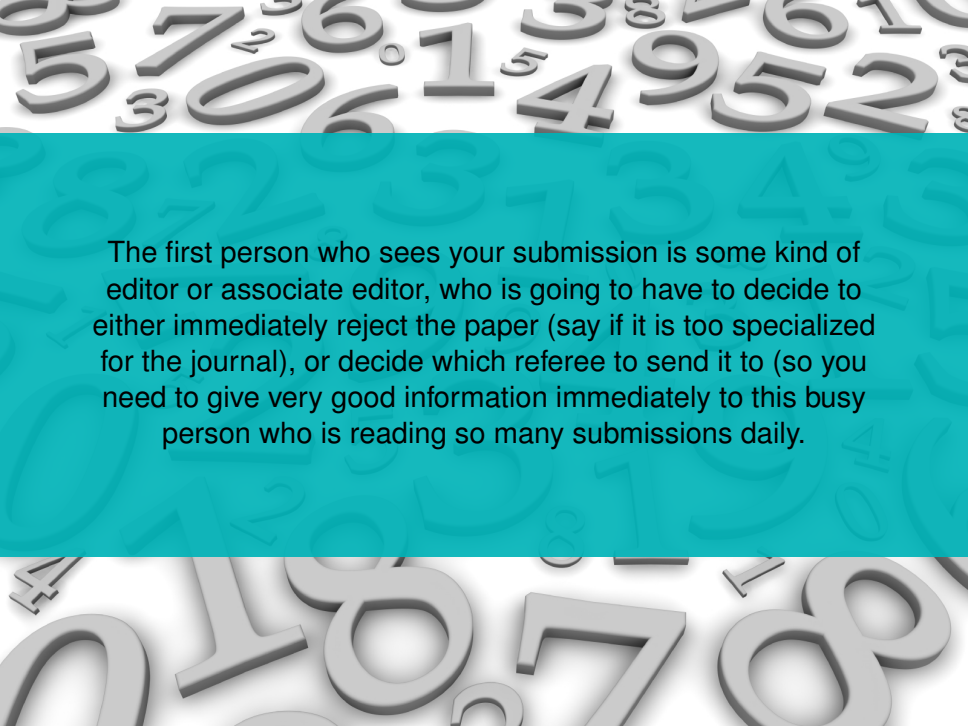


On the spiral plan, chapters are written in the order
1, 2, 1, 2, 3, 1, 2, 3, 4, etc..



As he wrote: “You think you know how to write Chapter 1, but after you have done it and gone on to Chapter 2, you realize that you could have done a better job on Chapter 2 if you had done Chapter 1 differently. There is no help for it but to go back, do Chapter 1 differently, do a better job on Chapter 2, and then dive into Chapter 3.”

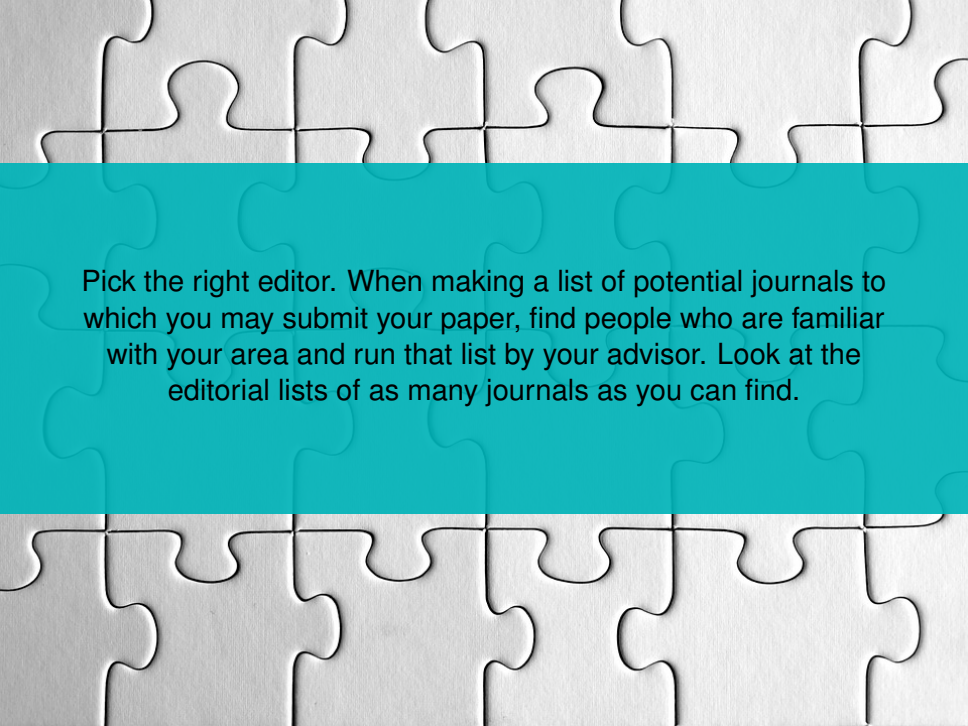
To actually get your paper through the refereeing process, you have to appeal to a number of people who are far from your area of expertise, and have a number of distractions that may prevent them from seeing the value of your work .

The background of the slide features a white surface covered with numerous 3D-rendered numbers in various sizes and orientations. A solid teal rectangular box is positioned in the center, containing white text. The numbers are scattered across the top and bottom areas, with some appearing to be partially obscured by the teal box.

The first person who sees your submission is some kind of editor or associate editor, who is going to have to decide to either immediately reject the paper (say if it is too specialized for the journal), or decide which referee to send it to (so you need to give very good information immediately to this busy person who is reading so many submissions daily).

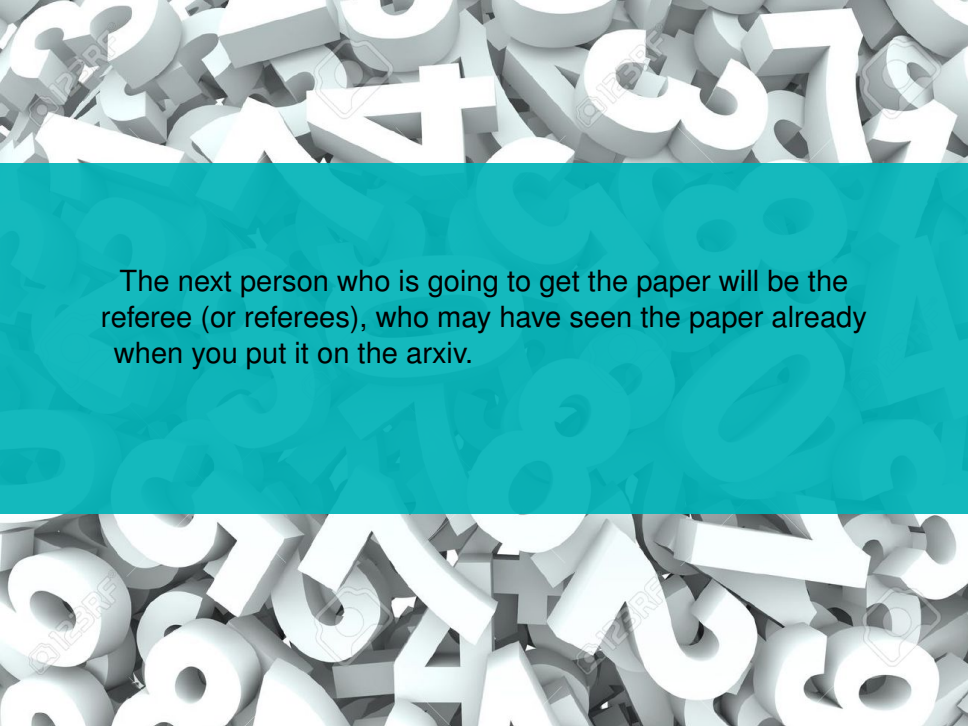


Pick the right editor.

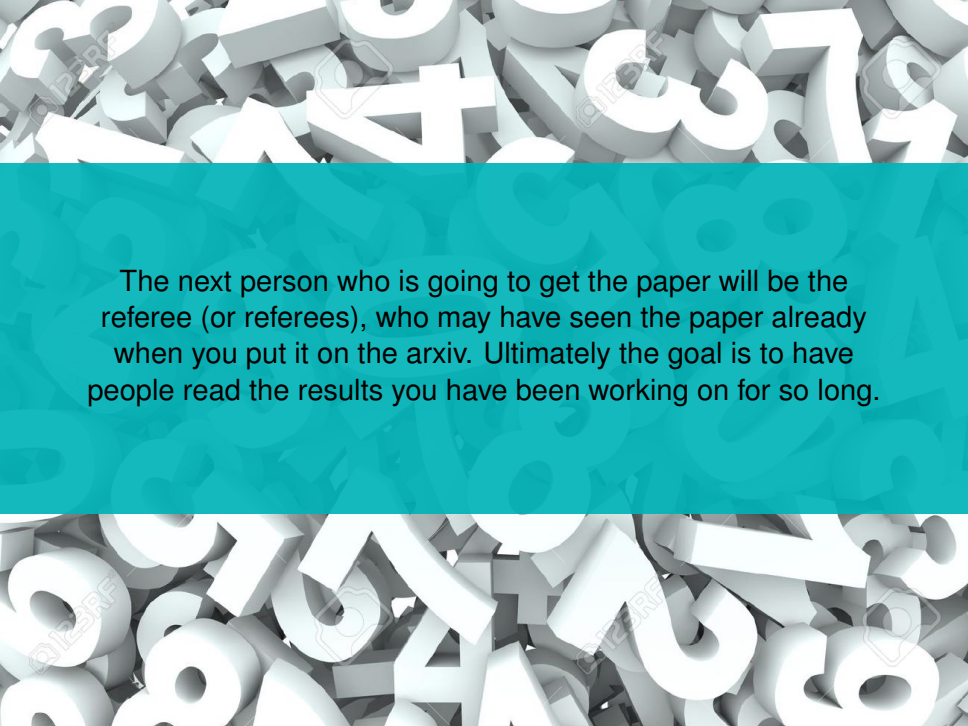


Pick the right editor. When making a list of potential journals to which you may submit your paper, find people who are familiar with your area and run that list by your advisor. Look at the editorial lists of as many journals as you can find.

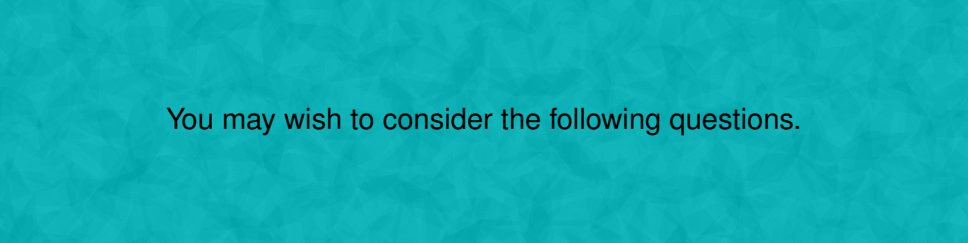
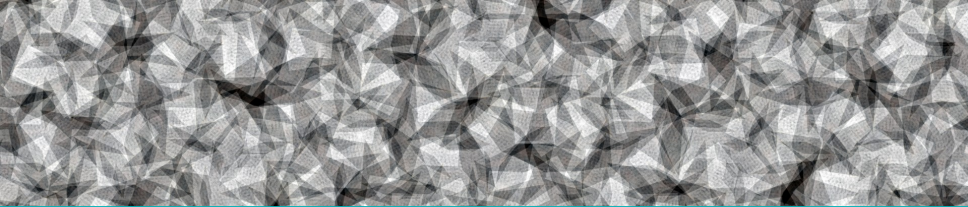
Your abstract and first page should be non-technical enough that the editor of the journal can read it, but it must contain enough information to convey the result (which can be paraphrased, with a forward reference to the precise statement), why the result is nontrivial, and also interesting, and new, and how it fits into the literature.



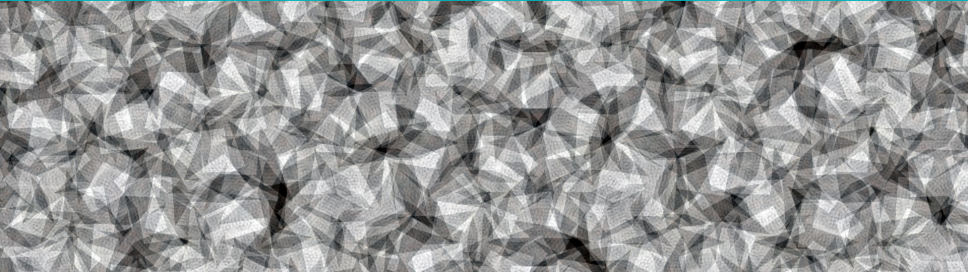
The next person who is going to get the paper will be the referee (or referees), who may have seen the paper already when you put it on the arxiv.



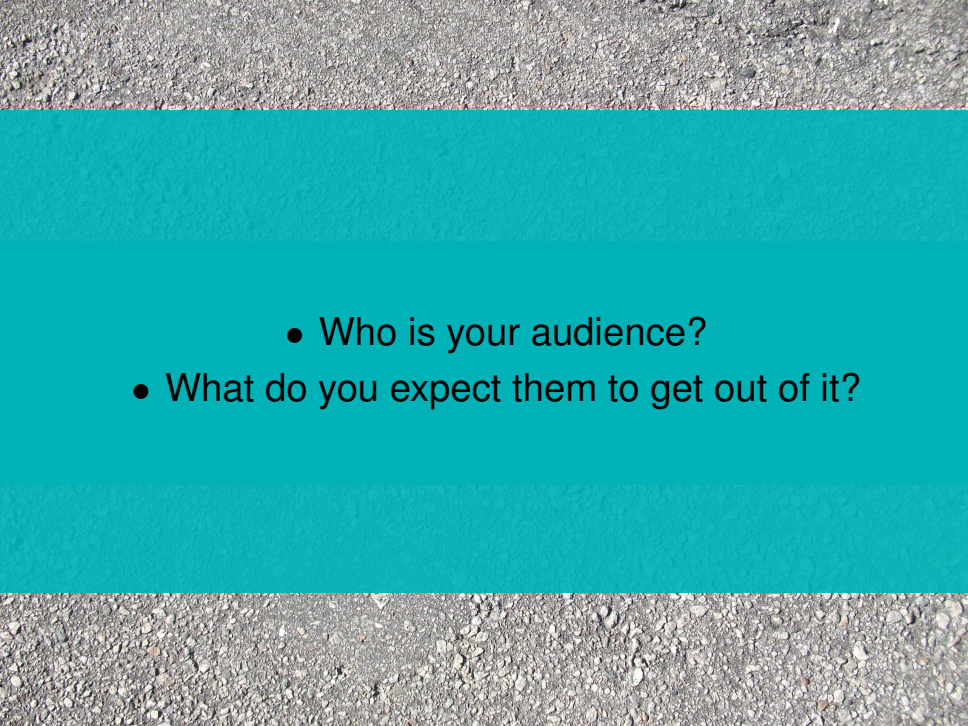
The next person who is going to get the paper will be the referee (or referees), who may have seen the paper already when you put it on the arxiv. Ultimately the goal is to have people read the results you have been working on for so long.



You may wish to consider the following questions.



- Who is your audience?

- 
- The image features a solid teal background. At the top and bottom, there are horizontal bands of a light-colored, coarse-grained material, possibly gravel or crushed stone, which appear to be part of a larger surface like a road or path.
- Who is your audience?
 - What do you expect them to get out of it?

Every reader has three basic questions:

- What?

Every reader has three basic questions:

- What?
- Why?

Every reader has three basic questions:

- What?
- Why?
- How?

What is proved here?

What is proved here? **What** is the point of this paper?

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What are the results?

Why are these results interesting?

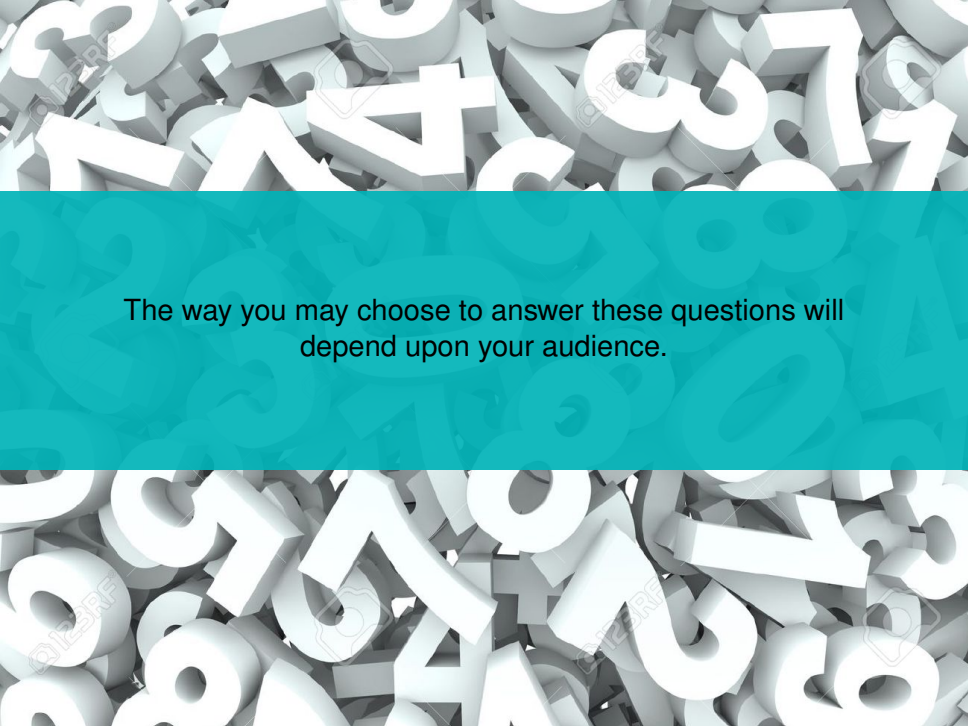
Why are these results interesting? **Why** are they valuable?

Why are these results interesting? **Why** are they valuable?
Why are these results good?

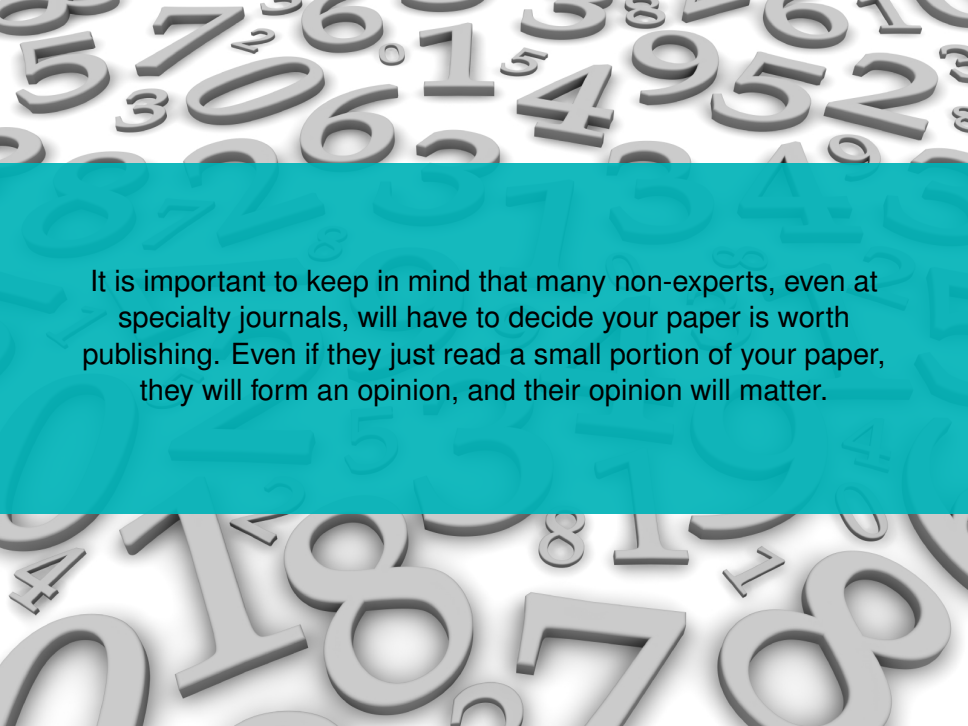
How were these results proved?

How were these results proved? **How** is it that such an obviously interesting problem didn't get solved until now?

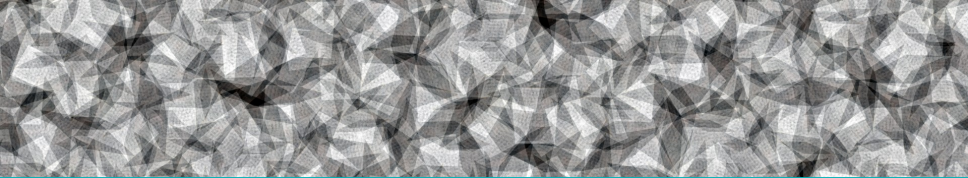
How were these results proved? **How** is it that such an obviously interesting problem didn't get solved until now?
How were **you** the one to do this thing?

The background of the slide is composed of a dense, overlapping field of 3D white numbers (0-9) that appear to be floating or scattered. A solid teal rectangular box is centered horizontally and vertically, containing the main text. The numbers are rendered with soft shadows, giving them a three-dimensional appearance.

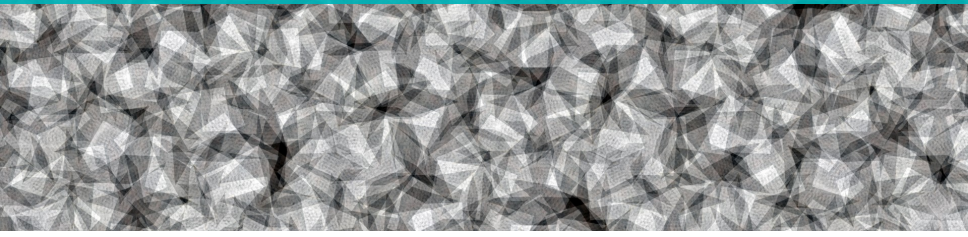
The way you may choose to answer these questions will depend upon your audience.

The background of the slide is a light gray surface covered with numerous 3D-rendered numbers (0-9) of varying sizes and orientations. Some numbers are in sharp focus, while others are blurred in the background, creating a sense of depth. A solid teal-colored rectangular box is centered horizontally and vertically, containing white text.

It is important to keep in mind that many non-experts, even at specialty journals, will have to decide your paper is worth publishing. Even if they just read a small portion of your paper, they will form an opinion, and their opinion will matter.



So do obvious things like spellchecks! People who aren't careful enough to use their computer to check their spelling may be regarded as sloppy and untrustworthy.



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- The person who will only read the abstract and some (or all) of the first page.

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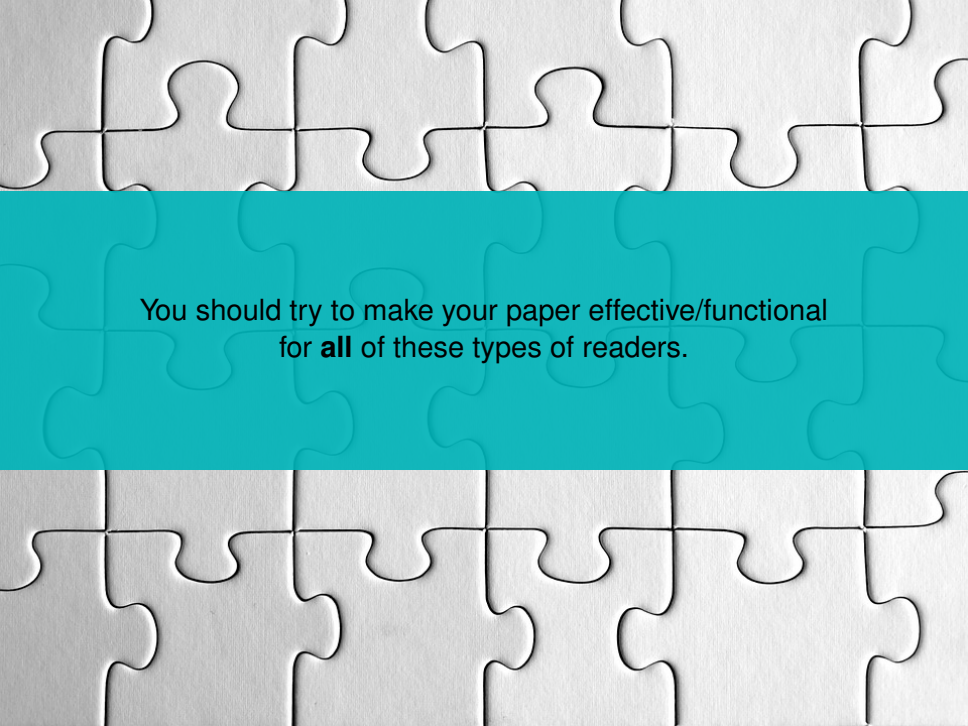
- The person who will only read the abstract and some (or all) of the first page.
- The person who will skim the introduction.

Here are four different types of readers:

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- The person who will skim the introduction.
- Someone like a referee or future student or postdoc, who will try to read the whole paper.

Here are four different types of readers:

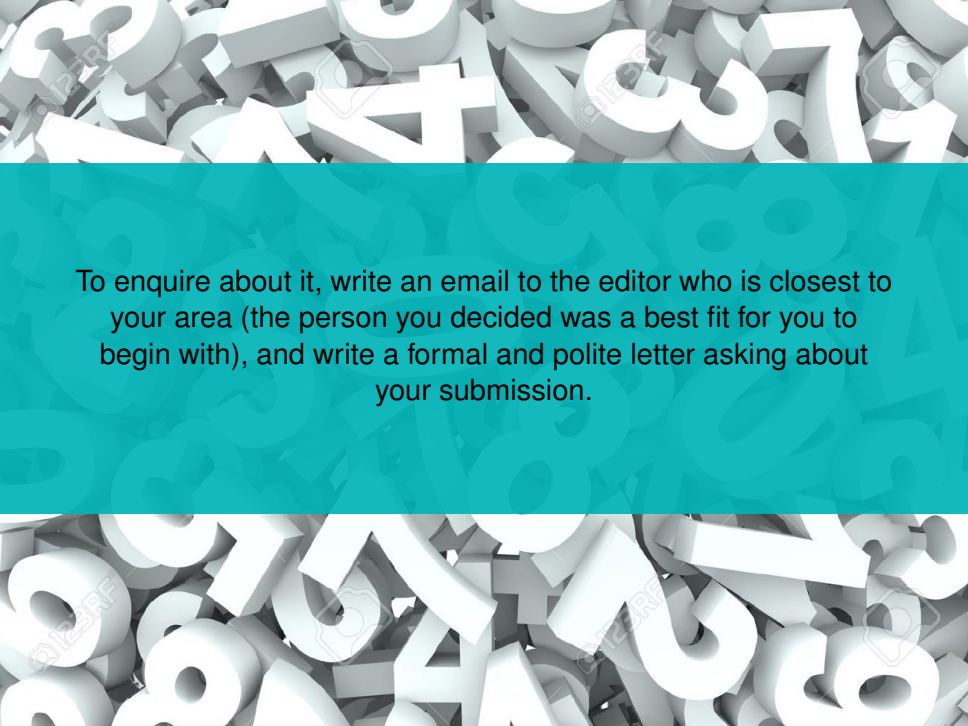
- The person who will only read the abstract and some (or all) of the first page.
- The person who will skim the introduction.
- Someone like a referee or future student or postdoc, who will try to read the whole paper.
- The user: who will try to find the result to cite, method to use, example to understand, or open problem to solve.




You should try to make your paper effective/functional
for **all** of these types of readers.

Once the referee has the paper, he or she may keep it for a long time. You may wonder when it is OK to ask an editor about your paper.


Once the referee has the paper, he or she may keep it for a long time. You may wonder when it is OK to ask an editor about your paper. There are a lot of varying opinions on this, but I think after 7 months, you are OK to ask about the status of your submission.


The image features a decorative background. The top and bottom sections are filled with a dense, overlapping pile of 3D white numbers (0-9) and some letters, creating a textured, geometric look. A solid teal-colored horizontal band runs across the middle of the image, serving as a background for the text.

To enquire about it, write an email to the editor who is closest to your area (the person you decided was a best fit for you to begin with), and write a formal and polite letter asking about your submission.




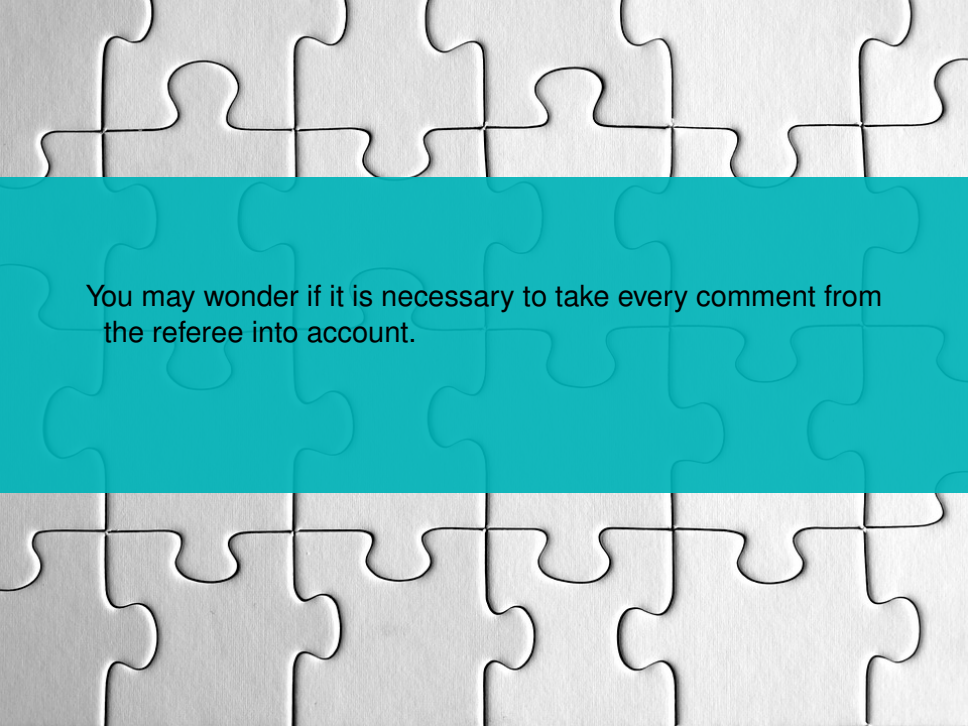
Once you get the paper back, you may find that the referee has recommended it be accepted as long as you answer some questions or make some corrections.



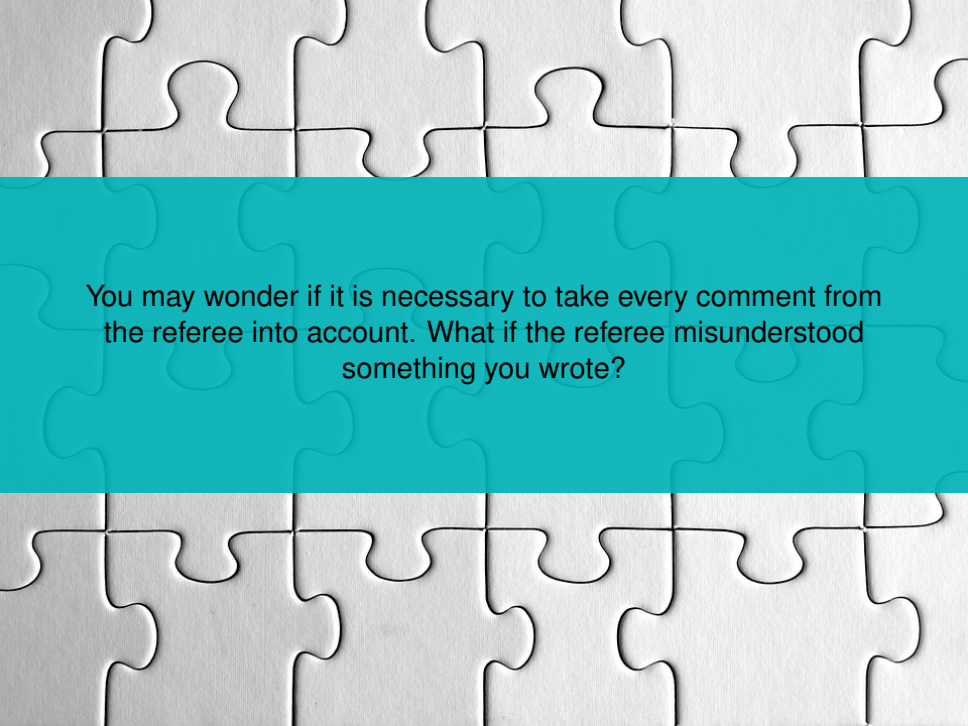


Once you get the paper back, you may find that the referee has recommended it be accepted as long as you answer some questions or make some corrections. If this is the case, get on this immediately. Drop everything else and take care of this very important priority. Get the paper back to the referee while your results are fresh in his or her mind.

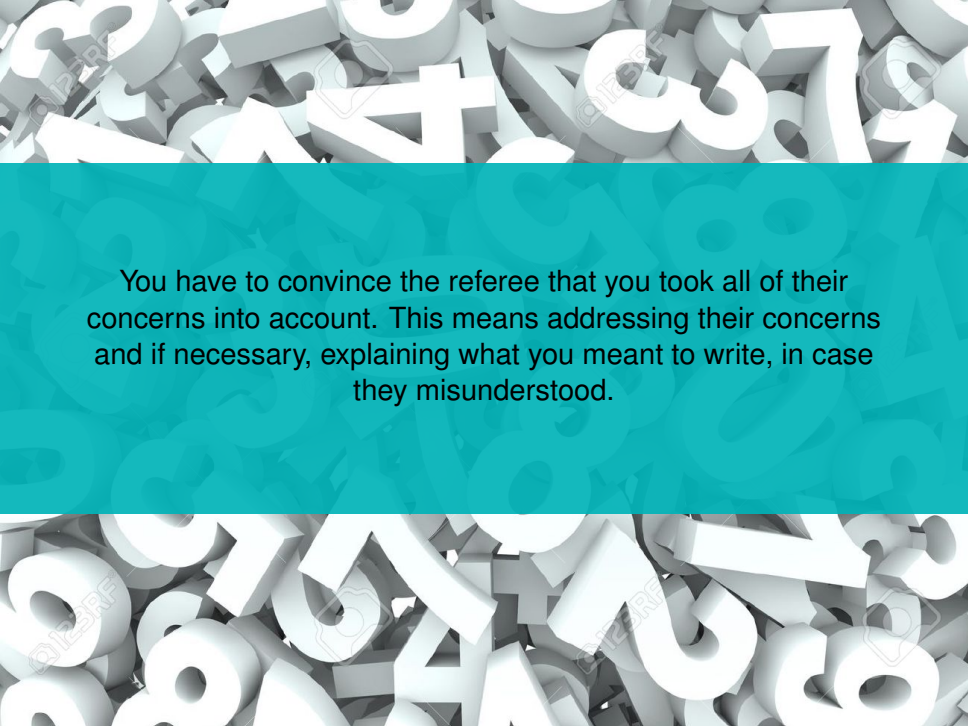




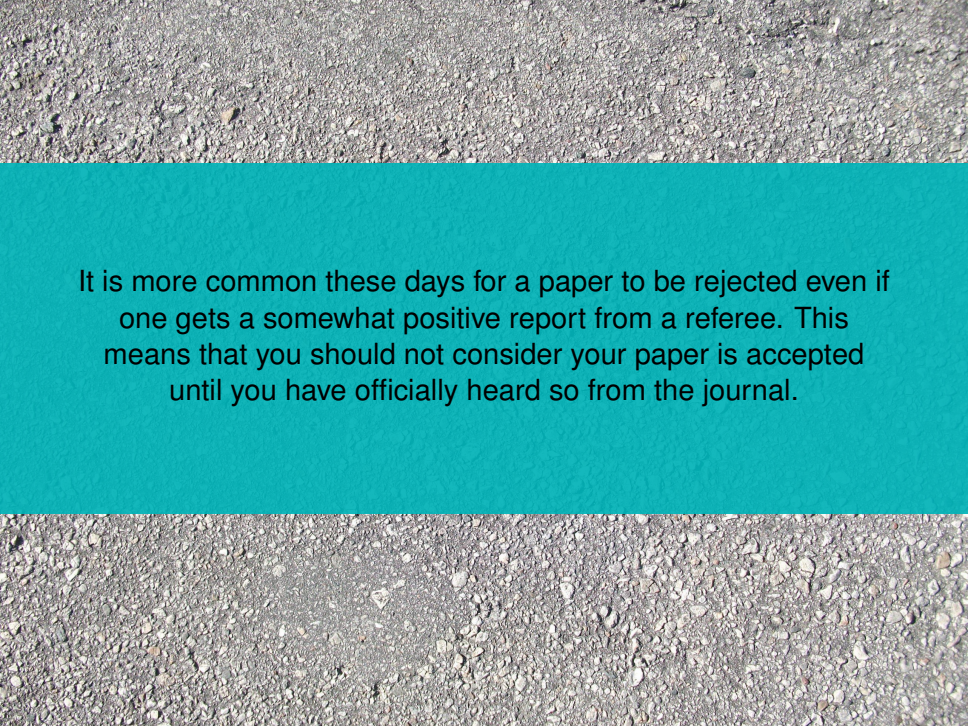
You may wonder if it is necessary to take every comment from the referee into account.



You may wonder if it is necessary to take every comment from the referee into account. What if the referee misunderstood something you wrote?



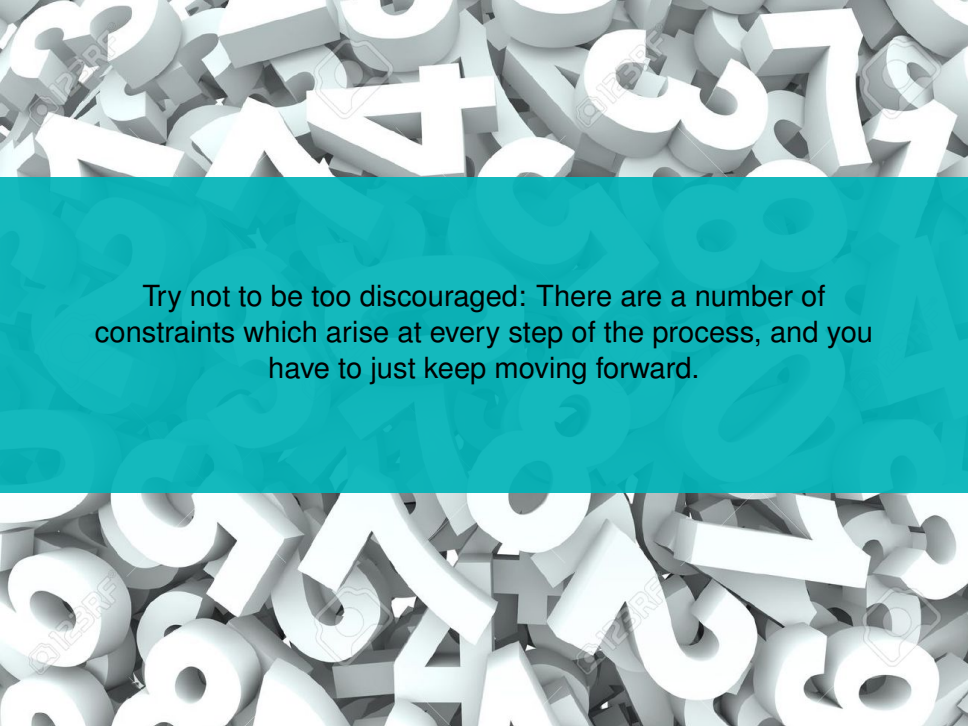
You have to convince the referee that you took all of their concerns into account. This means addressing their concerns and if necessary, explaining what you meant to write, in case they misunderstood.

The image features a background of light-colored gravel. A solid teal rectangular box is centered horizontally and vertically, containing black text. The text is left-aligned within the box and consists of four lines.

It is more common these days for a paper to be rejected even if one gets a somewhat positive report from a referee. This means that you should not consider your paper is accepted until you have officially heard so from the journal.

If you receive a rejection, try to learn as much as you can from what the referee writes. If possible, take that feedback into account and at minimum, rewrite the introduction to address those concerns. Your paper may very well end up in the same person's hands the next time you submit it.

It is always a good idea to have an ordered list of journals to submit to. That way, if your first choice ends up in a rejection, you won't waste time selecting the next one – you can simply rewrite the intro, make whatever other changes you think would help in case you get the same, or like-minded referee, and send it immediately onto the next journal on your list.



Try not to be too discouraged: There are a number of constraints which arise at every step of the process, and you have to just keep moving forward.



GOOD LUCK!