

MATH 592

Review of seminar process
and participant responsibilities

Participants take turns

- Everyone will process the same number of articles
- Consider switching speak-on-same-days “buddies”

Select an article from the bibliography

- Go roughly chronologically, but certainly it's not necessary to go strictly in order
- Can put your name by individual articles, or claim a series of articles, for the present or the future
- Deadline for having the next week's articles chosen is at the end of the day each prior Tuesday

Digest your article's contents

- Always welcome to contact me regarding the articles you're reading

Give a presentation on your article's contents

- Plan for 15–20 minute presentations (will probably turn into 20–25 minutes with questions and remarks)
- If you give a talk with computer slides, email me the files (\LaTeX and PDF) for my records
- Use our standardized notation from the evolving document whenever possible
- More important to interpret a article (talk about its results in modern terms, put it in the context of related results before and after, and generally use our existing knowledge to frame its particular contribution) than to transmit the contents of the article the same way the author did
- Concentrate on the story you want to tell the audience; leave out details that don't advance that narrative

Write up (in \LaTeX) a brief description of the article's results and possibly the methods

- End with a line with the following syntax: “This article cites~`\cite{1909.Landau, 1916.Hardy, 1930.Polya, 1933.Skewes_1}`.”
- For citations from our “static” list, use exactly the label from the first column of the Google sheet
- For citations from the second part of the “evolving” list, just go with YEAR.FIRSTAUTHOR (last name only) and I’ll make sure it’s correct
- Send me the summary by the day after the seminar where you presented

Some observations on writing style

- In general, we are placing more of an emphasis on concision and brevity than we would in a research article or in the presentations
- Tend to omit the background context for the results—the “evolving” document already states those results
- Default is to list only the most general versions of results, rather than the special cases the authors use as warmups
- Exactly how much notation to include or omit is always a fine balance; we probably aim towards less notation here than we would in a talk
- Use standardized notation (see “evolving”) when possible and helpful, rather than preserve the authors’ notation
- Use modern mathematical terminology and perspective
- Preference for inline math over displayed math

Some notational examples

- $\pi(I)$ for an interval I ; for example, $\pi((x, y]) = \pi(y) - \pi(x)$
- $\pi(x; q, a, b) = \pi(x; q, a) - \pi(x; q, b)$
- $\Delta^\pi(x) = \pi(x) - \text{li}(x)$ and $\Delta^\psi(x; q, a) = \phi(q)\psi(x; q, a) - x$
- $E^\pi(x) = \frac{\Delta^\pi(x)}{\sqrt{x}/\log x}$ and $E^\psi(x; q, a) = \frac{\Delta^\psi(x; q, a)}{\sqrt{x}}$
- $\theta_r(x) = \sum_{p \leq x} \frac{\log p}{p}$ and $M_e(x) = \sum_{n=1}^{\infty} \mu(n)e^{-n/x}$

In your summaries

- Use macros `\li` and `\Li`
- Use `\mod` in your summaries; “evolving” treats it like `\pmod` but with better spacing
- I can send you these macros if you want

Check your article's references

- If any of them are comparative prime number theory, and not already on our list, tell me about it
- Use the “Make Link” feature of MathSciNet; just send me the resulting link rather than type the information in email
- When checking what sources we already know about, check “evolving” rather than “static”
- The list of additionally-discovered sources, starting at [130], is in chronological order for easy searching
- When in doubt, just nominate it for me to worry about

Check the list of articles on MathSciNet that refer to yours

- Same standards as above

Check your article's entry in the "static" bibliography

- MathSciNet's listing is the final authority
 - If the Math Review number is absent, please send it to me even if everything else is correct
 - You can use the "Make Link" trick on corrections to the static bibliography too if you wish
-
- Do all these bibliographic tasks by the day after the seminar where you presented

Monitor the “evolving” document

- Make sure I incorporated your bibliographic corrections
- Make a habit of checking my versions of your summaries, to make sure my changes didn't introduce flaws or omissions
- Suggested improvements (on any part of the document) are always welcome

Keep the shared Google sheet up to date

- Check the boxes when those bibliographic tasks are done

General community standards

- Let me know if you need to be late to (or miss) a seminar, or if you'll be late in signing up for articles or writeups/bibliographic tasks
- You may bring food to our seminar
- Calibrate our timers to start right at 11am
- Use our own words or explicitly quote sources
- Suggestions for improving the process are always welcome
- Enjoy the experience!