

Public outreach

Why? What? How?



Why?

Over the past 100 years mathematics has become increasingly specialized, and currently it can be difficult to understand research in fields other than your own. This specialization also means that non-mathematicians often have no concept of what mathematical research entails. Further, most academic mathematicians are judged by their publication records: both the quantity of papers and the prestige of the journals they appear in. Consequently, mathematicians feel compelled to write in a very specific style, aiming to present the results in the most concise language possible and to impress the reader with their brilliance.

- User's Guide Project

Public interest

- Funding
- Job market
- Next generation
- Future-proofing
- Reduce math phobia

We are responsible for the way mathematics is presented to society - its public image. How do we want it to look? To feel?





Your expertise

- Can't overstate the power of anyone with internet access being able to learn just about anything by searching online
- You specifically can contribute
- More people interested in your field
- "Learning by teaching"

"True development is about transforming the operating system itself, not just increasing your fund of knowledge" - Kagan-Laskow

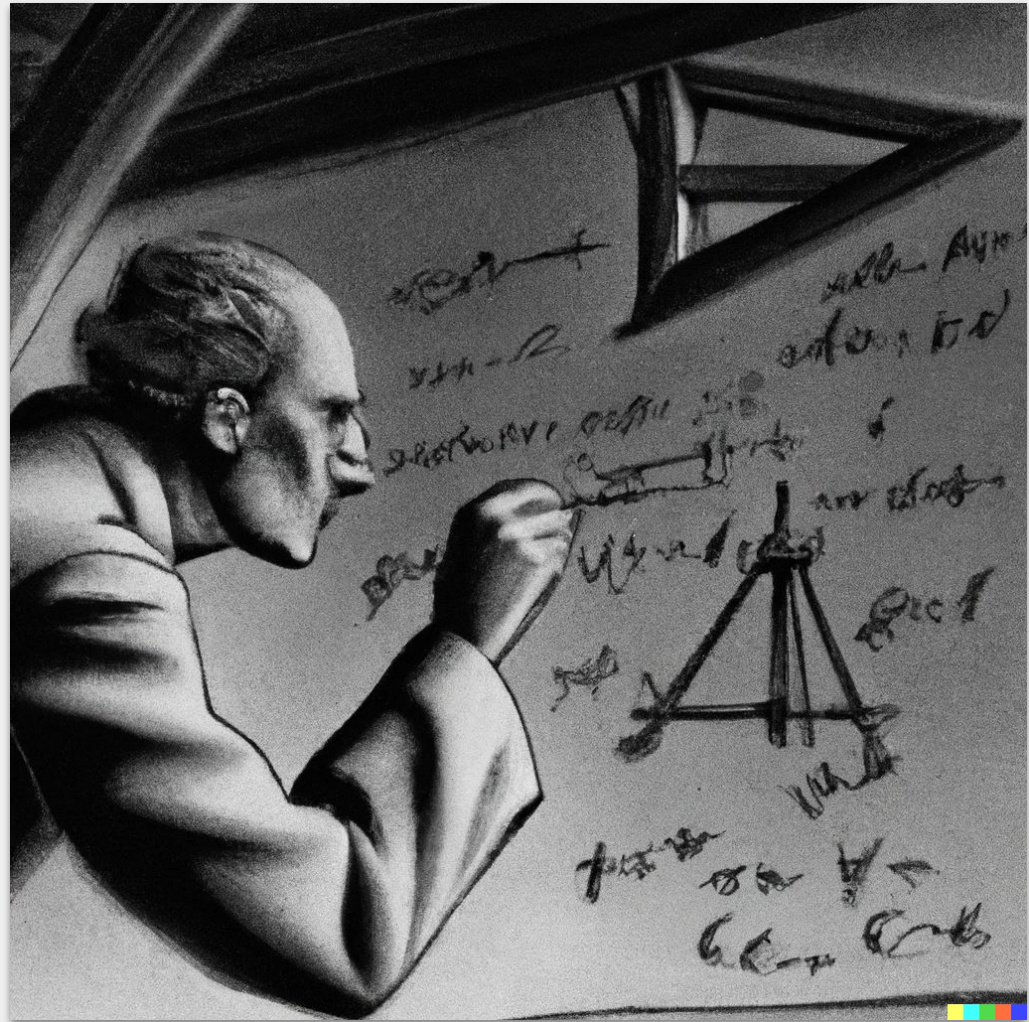


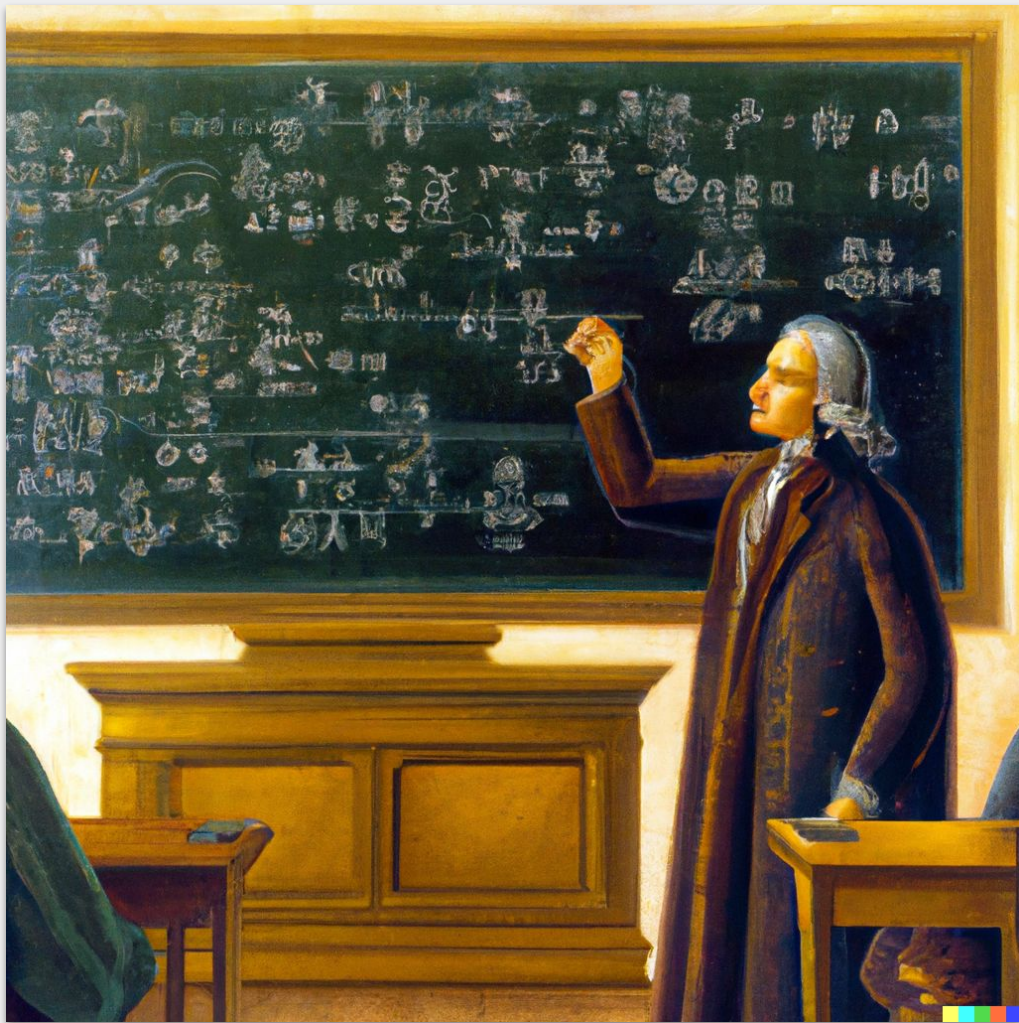
PBQUCT

What?

Writing

- Blogs
- Survey papers
- “Opinion pieces”
- Introduction to your field
- Roadmap
- Extra information about a paper, like omitted details, comments on code, taking the reader through the discovery process, etc
- [The user guide project](#)





Speaking

- Research talks
- Outreach talks
- “Getting more people to study and like mathematics”-talks
- Youtube videos
- Podcast
- Stand at events
- Debates, panels, etc



HOW?

Blog

- Easy
- Fun
- Personal
- Learn a lot
- Forces understanding
- Good practice

- Wordpress
- Github
- Medium
- Notion
- Guest writing

Hi!

Welcome to my mathematics blog. On here I write my way through my mathematics education, mostly focusing on algebraic topology, but also other things that interests me.



Chromatic redshift



topologi

Store norske leksikon / Realfag / Matematikk / Geometri og topologi / Topologi

Historie

[Generell topologi](#)

[Differensialtopologi](#)

[Algebraisk topologi](#)

[Bruksområder](#)

Les mer i Store norske leksikon

Topologi er et sentralt område i [matematikken](#) som i hovedsak prøver å forstå former og matematiske legemer. Fagfeltet er mer generelt enn [geometri](#), siden det ikke i særlig grad handler om begreper som [lengde](#), [vinkler](#) og [størrelse](#). I topologien kan alle objekter endres og deformerer uten at det endrer egenskapene deres. Det vil si at de kan vrís, vendes, strekkes på, klemmes og bøyes, så lenge man ikke river i stykker, punkterer, klipper eller limer noe. Topologi blir derfor ofte referert til som «gummi-geometri».

UTTALE topolog'i
ETYMOLOGI av topo- og -logi



SKREVET AV
STIPENDIAT I MATEMATIKK
Torgeir Aambø
NTNU

Historie

Topologi er et av de nyeste store fagfeltene i matematikken, og det meste av utviklingen har skjedd i mer moderne tid. Noen av de grunnleggende ideene har vært til stede lenge, og ble særlig beskrevet av [Gottfried Wilhelm Leibniz](#) på 1600-

SNL

- Interesting
 - Possibility to be read by a lot of people
 - Fun challenge
 - Legitimizing
 - Something similar
- (encyclopedias) probably exists in most languages






Talks/stands/stuff

- Talks for students
- Conferences
- Your old high school?

- Ask IMF
- Ask IE

Mathematical talks

A list of mathematical talks I have held.

Where	What	When	Other
<u>PITA seminar</u>	Torsion in topology and algebra	??	
<u>YoungHom</u>	Algebraicity in monochromatic homotopy theory	16.02.23	
<u>NTNU Topology seminar</u>	Algebraicity in monochromatic homotopy theory	28.11.22	
	Math starting week	Hanging a picture using knots and algebraic topology	17.08.22
	Math starting week	Knots and links	17.08.22
	<u>MMI</u>	Our <i>ties</i> to industry	02.06.22
<u>Seminar</u>	Stable ∞ -categories	25.03.22	<u>Notes</u>
<u>PhD seminar</u>	Fixedpoint functors in equivariant homotopy theory	29.10.21	
<u>Deltas math club</u>	The homotopy groups of spheres	21.10.21	Notes: <u>1</u> , <u>2</u>
	Math starting week	Knot theory	19.08.21
	<u>Inspiration week</u>	Knot theory	09.08.21

Upcoming opportunities

- Researchers' night 23 (Info-meeting 27. Feb)
- Forskningstorget 23 (Info-meeting 13. Mar)
- SoME3 (3B1B's Summer of Math Exposition) (?)
- Abel competition
- Norwegian National PhD Meeting in mathematics (17.-18. aug)
- EMCI blog (?)
- This PhD-seminar
- IMFs outreach-committee
- HFEL8000 – Communicating science




Thanks!

IMO2022

- Showcasing mathematics to a more general public
- Meet young future mathematicians








The screenshot shows the Instagram profile for 'morgendagens_helter'. The profile picture is a white circle containing a red stylized logo. The bio reads: 'Morgendagens helter. Unge mennesker med store drømmer. Og talentet som skal til for å lykkes. Bli kjent med menneskene og historiene vi håper vi snakker om i morgen! morgendagenshelter.no'. It lists 446 posts, 11.1K followers, and 1,609 following. A row of seven circular profile pictures of various people is shown below the bio. At the bottom, three post thumbnails are visible: a person at a podium, a cyclist, and a group of skiers.

morgendagens_helter  Following Message +id ...

446 posts 11.1K followers 1,609 following

Morgendagens helter
Unge mennesker med store drømmer. Og talentet som skal til for å lykkes. Bli kjent med menneskene og historiene vi håper vi snakker om i morgen!
morgendagenshelter.no

Followed by rustadt, imo2022oslo, tinasatherr + 3 more

FLL-finale! Toppidretts... Takeover Matte-OL Sognefjellet ... Skigymnass... Heltenes so...

POSTS REELS TAGGED

