Art as a Tool for Science

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Motivation

Why using art?

- Artwork and illustrations are a door opener to science
- A good illustration can help clarify scientific research
- Great tool for communication - both to a scientific and non-scientific audience
- It’s fun!

Getting started

Choosing a topic

- What **inspires** you?
- What do you find **fascinating**?
- What do you want to **learn** more about?
- If you’re doing **research**, you might choose something about that topic!

Choosing a medium

- **Make sure to know the target audience** - a scientific paper might need another approach than an art show at a museum

- **Know your tools** - are you going to paint by hand, are you doing digital art, sculpting or maybe programming something interactive?

- **Select a format** - there’s a big variety from a painting, comics, to video games, knitting or any other creative output you can think of

Get into action

- Connect with other science artists on social media or join specific communities
- Participate in art challenges with scientific topics
- Have a look at other artwork - think about what you would do differently?
- Get a sketchbook to collect ideas, insights and your sketches

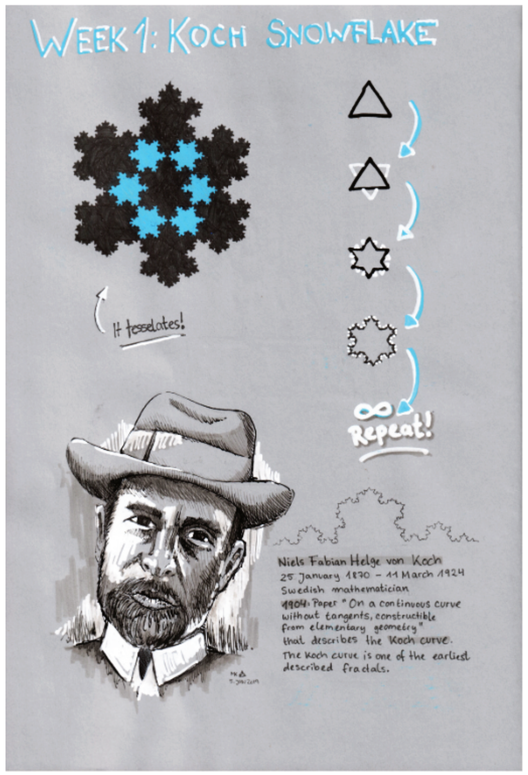
Examples

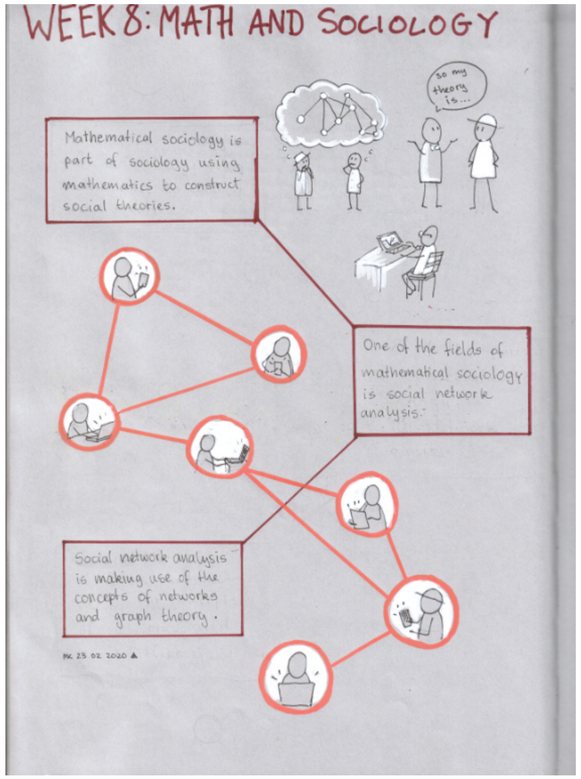
Mathyear

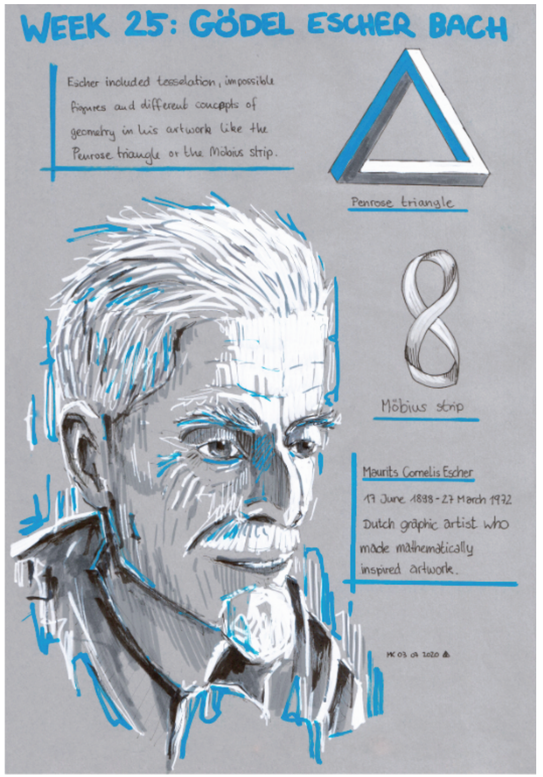
- Art challenge on mathematics and its interactions
- One challenge for every week of the year (52 in total)
- Created by Constanza Rojas-Mollina (mathematician and illustrator, https://crojasmolina.com/) and me
- Feel free to join and tag me on social media and use the hastag #mathyear when posting!

Challenge list

Mathyear - some of my sketches





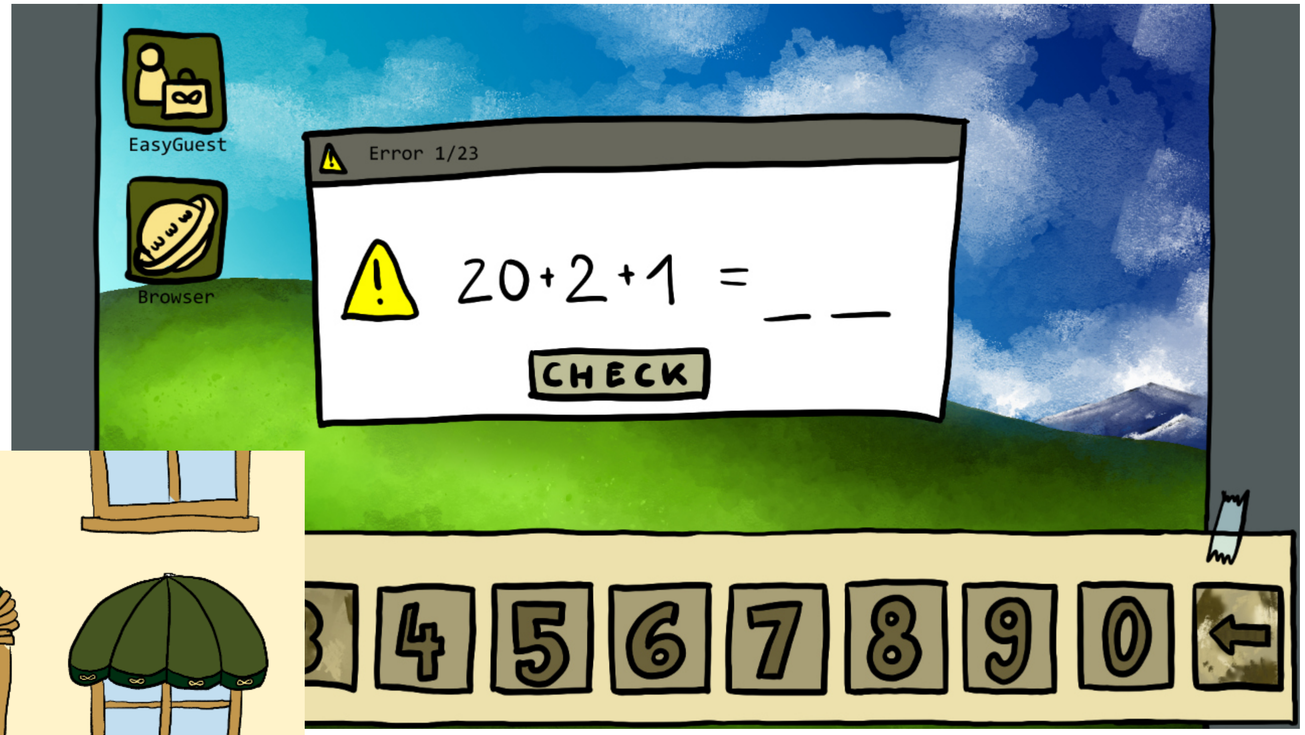


Hilbert’s Holidays

- Free browser game about mathematical history
- Point and click adventure game
- Developed during my fellowship at MIP.labor (https://miplabor.de/)

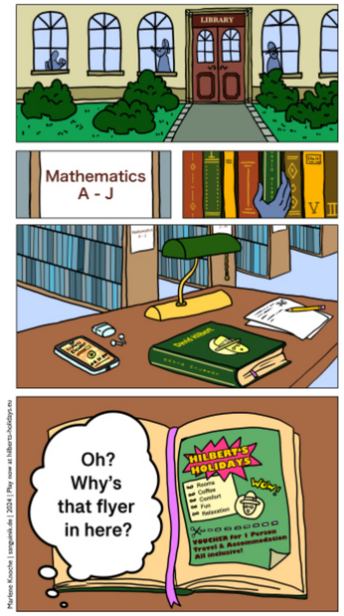
Play the game!

Hilbert’s Holidays

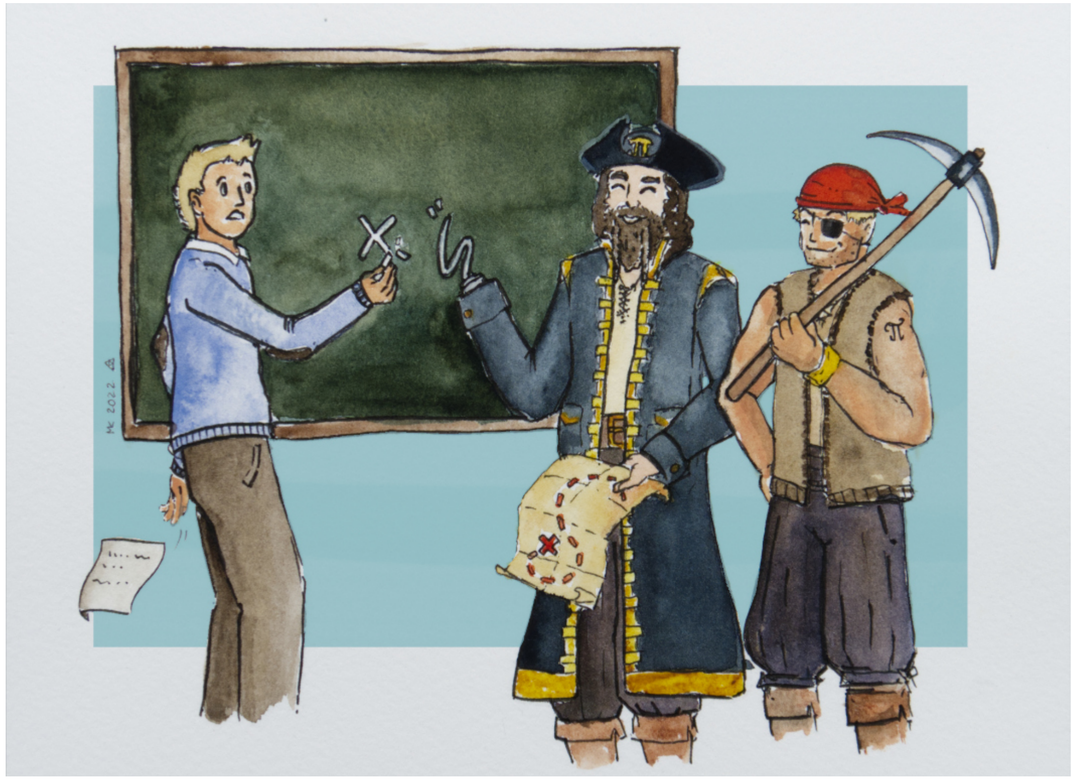


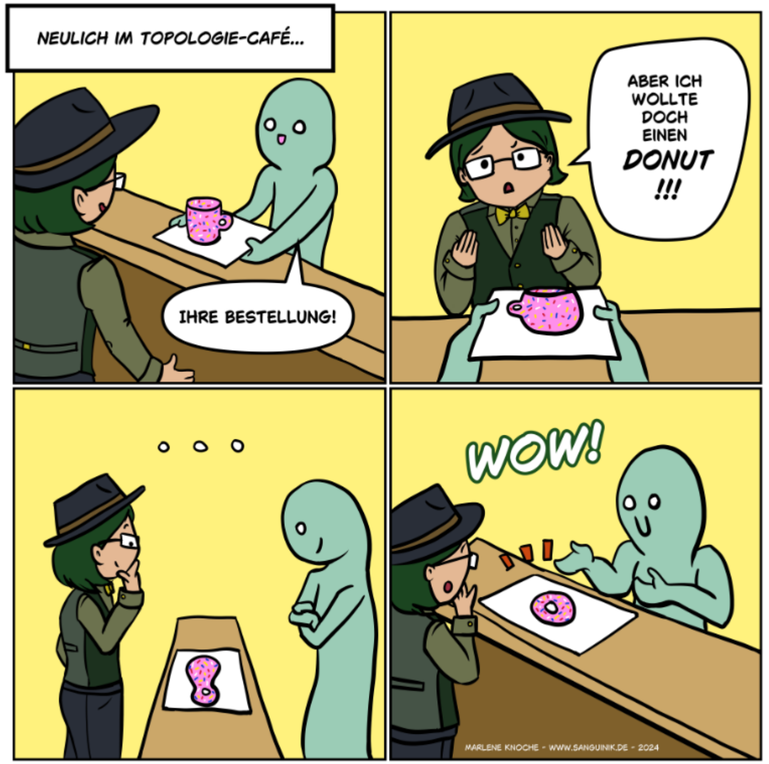
Hilbert’s Holidays - Prequel Comic

Read the comic online at the Science and Fiction blog by Dr. Helena Hartmann!



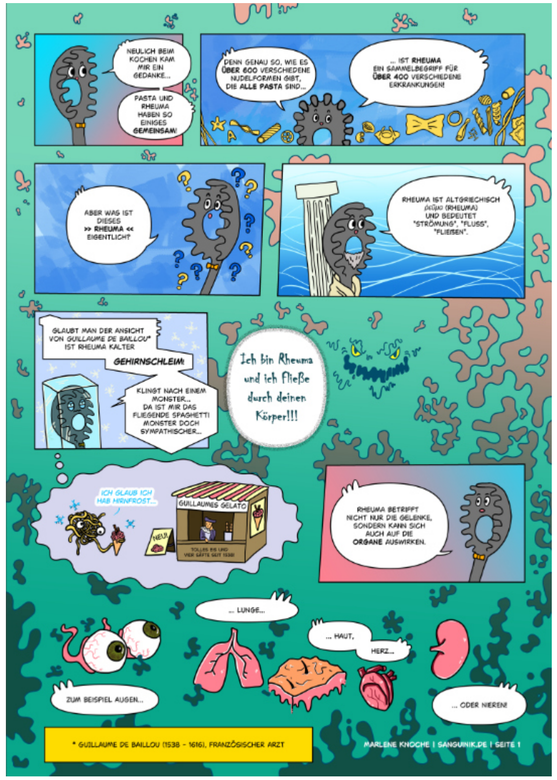
Other Mathematical Comics

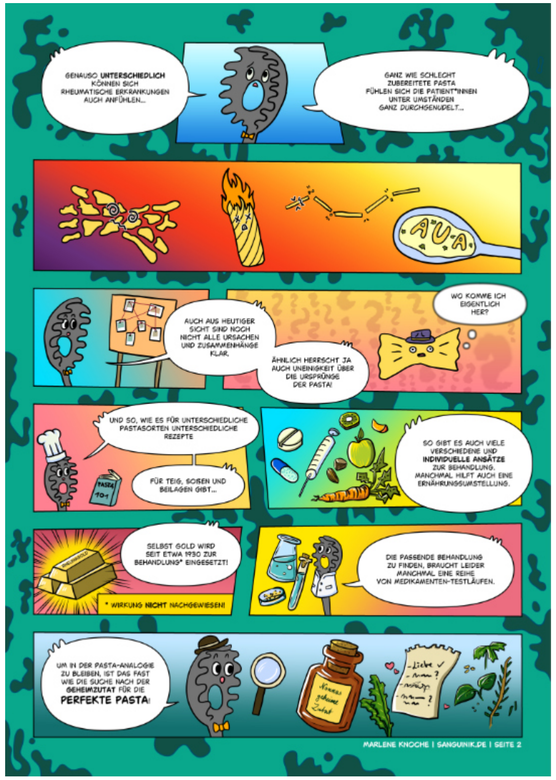


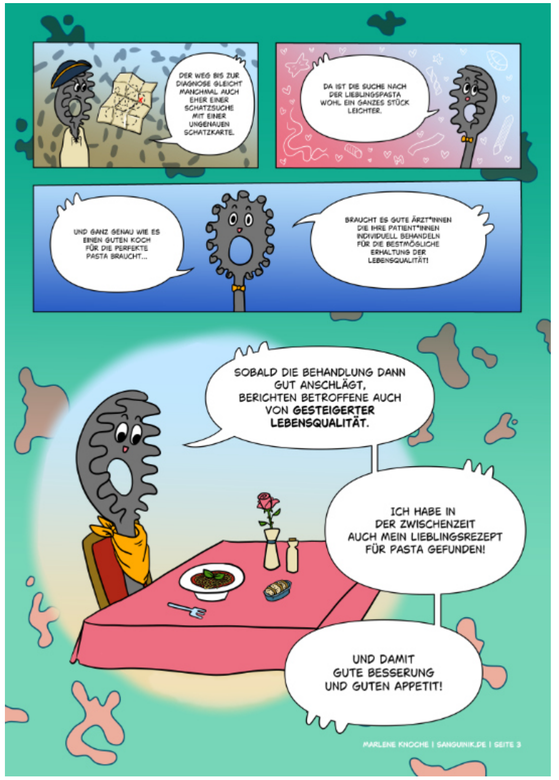


Other artwork inspired by Math

Comic on Rheumatism

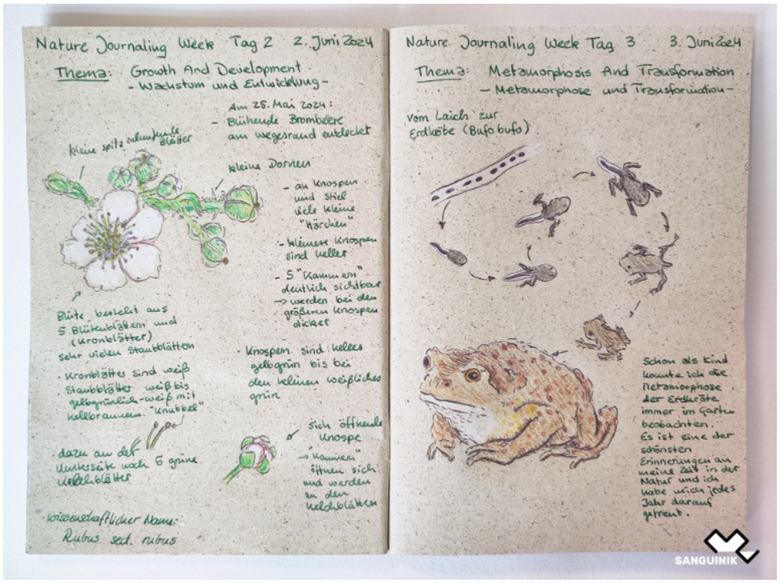






Knitted Sierpinski Triangle

Nature inspired artwork



Nature inspired artwork

Call for Papers

Math and Art Minisymposium at Annual OeMG-DMV Meeting in Linz, Austria, September 1 - 5, 2025

Our minisymposium aims to bring together researchers, artists, and educators interested in the synergy between mathematics and the arts.

Call for Papers

We particularly encourage talk proposals that highlight educational or outreach dimensions, including a clear learning outcome for audiences.

We will also have an exhibit space available. All information can be found on our website:

https://labwiki.mis.mpg.de/doku.php?id=mathematics_art_minisymposium_2025

Talk proposals will be accepted until April 2nd, 2025
Submission email: **math.art.dmv2025@gmail.com**

Let’s stay in touch!

Find all of my info on my website:

sanguinik.de/links

MARLENE KNOCHE
KUNST & ILLUSTRATION