



# Board Game and Card Game from the Life of a Scientist

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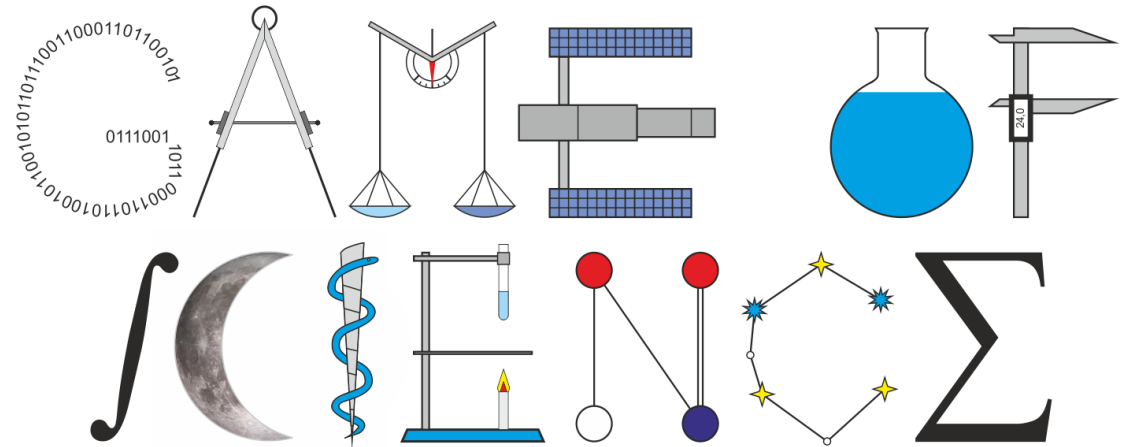
*Joint work with*

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German Cancer Research Center (DKFZ)

# Outline

- Motivation
- Overview of the board game
- Travel card version
- Evolution of the project
- Summary



# Motivation

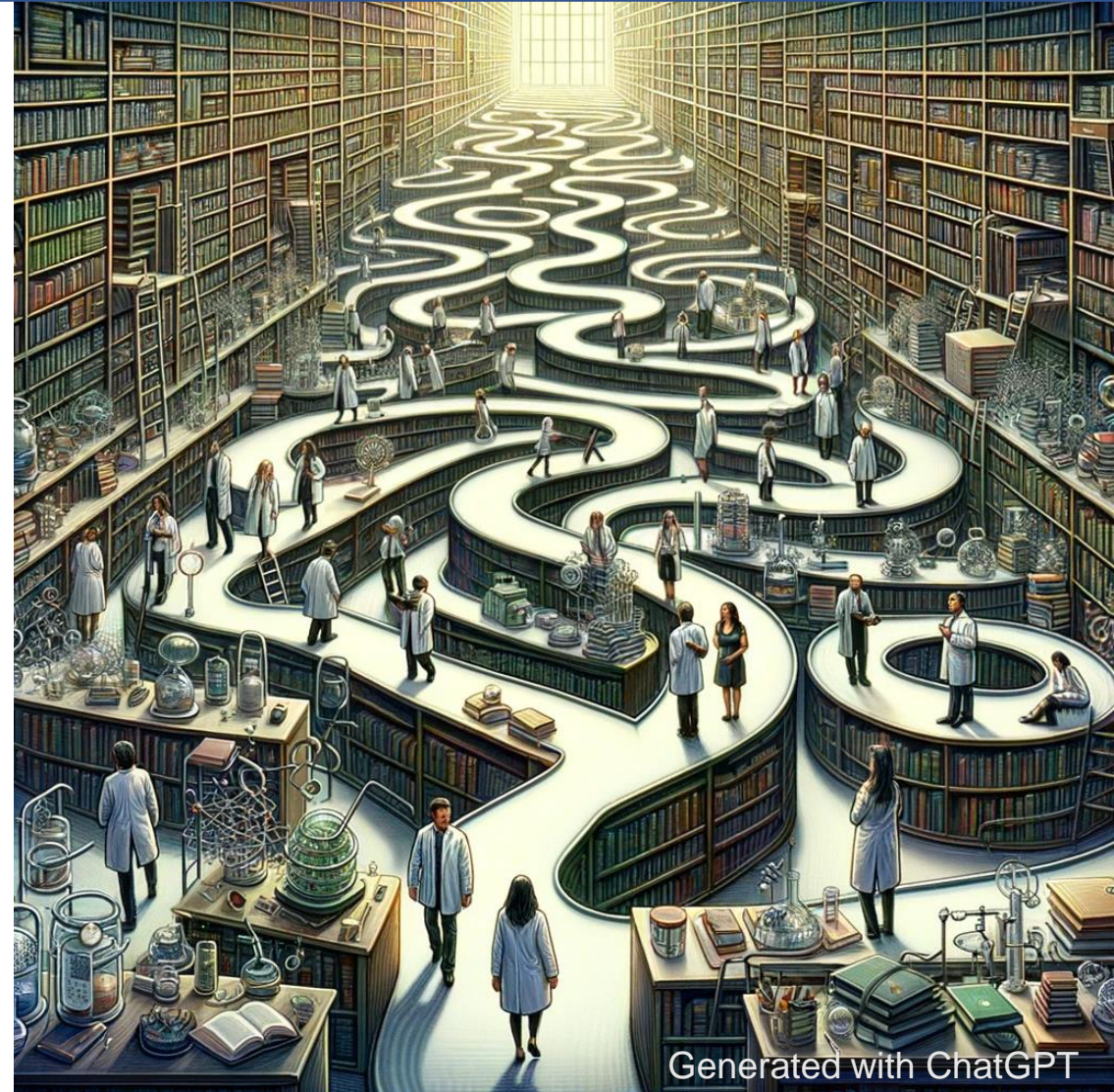
- Improve trust in scientists

## Board game

- Explain everyday life of a researcher
- Target group: board game enthusiasts, university students, researchers

## Card game

- Educational tool, various topics
- Shorter and quicker variant
- Target group: high school students, pupils

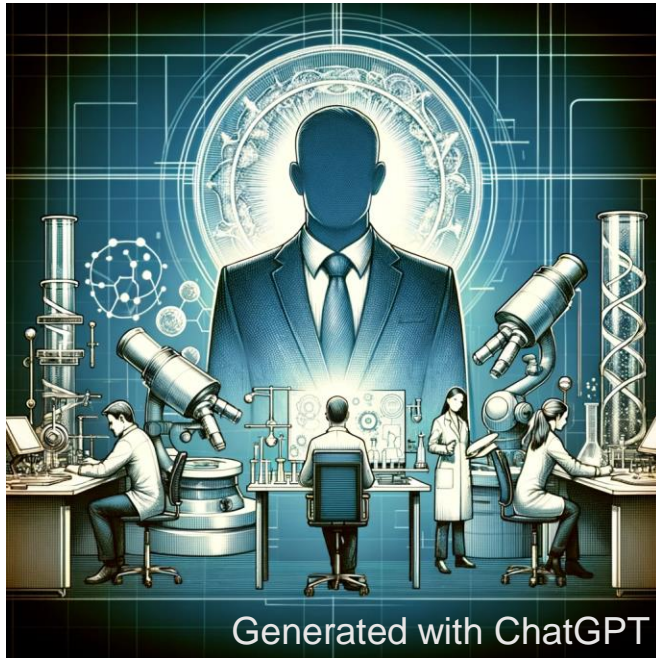




# Board-game



You are a researcher starting your research group/lab



Generated with ChatGPT

*Build your own lab and publish!*





# Board-game

- 12 rounds (years)
- Limited resources
  - Time
  - Knowledge
  - Money
- Victory points for publications
- Element of randomness
- Modular design
  - Preprint board
  - Cooperative goal
  - Random events





# Board-game

## Actions

- Do research
- Hire staff
- Collect results
- Publish
- Buy equipment
- Read up
- Teach
- Apply for a grant





# Card game



Sci-Me! travel version



# Sci-Me! Card game



## Main features

- Based on the core aspect of the board game
- About scientific publishing
- Educational tool
- Quick and short
- Multiple topics with same rules

## Goal of the game

- Be first player with 3 publications

## Summary of possible actions

### Actions

#### Investigate

Draw 2 cards from the draw pile. If there are not enough cards, shuffle the discarded cards and add them to the draw pile.

#### Study

Take the top card from the discard pile and place it in your expression.

#### Write

Put/replace/reorder up to 5 cards in your expression using cards from your hand.

#### Publish

Discard 2 cards from the draw pile and compare the sum of their difficulty values and your victory points with the number of cards in your expression.

The diagram shows a mathematical expression:  $1 + 3 + \text{your VPs} \leq$  followed by a sequence of six cards. The first card is a minus sign (-), the second is a zero (0), the third is a zero (0), the fourth is a plus sign (+), the fifth is a one (1), and the sixth is a zero (0). Above the second, third, fourth, fifth, and sixth cards are red "+1" labels. Below the entire sequence is the text "= 6 cards".

If the number of cards in your expression is larger or equal, publish!

#### Collaborate

Agree with another player on combining your expressions and try to publish them together. In the case of success, players are awarded  $\frac{1}{2}$  VP.

2x actions  
per round

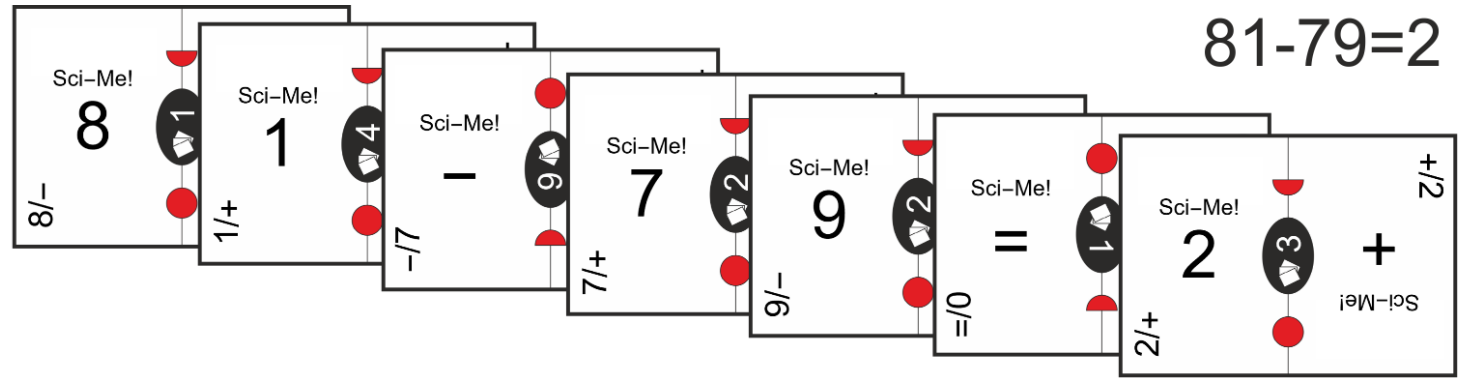


# Sci-Me! Card game - variants



## Current versions

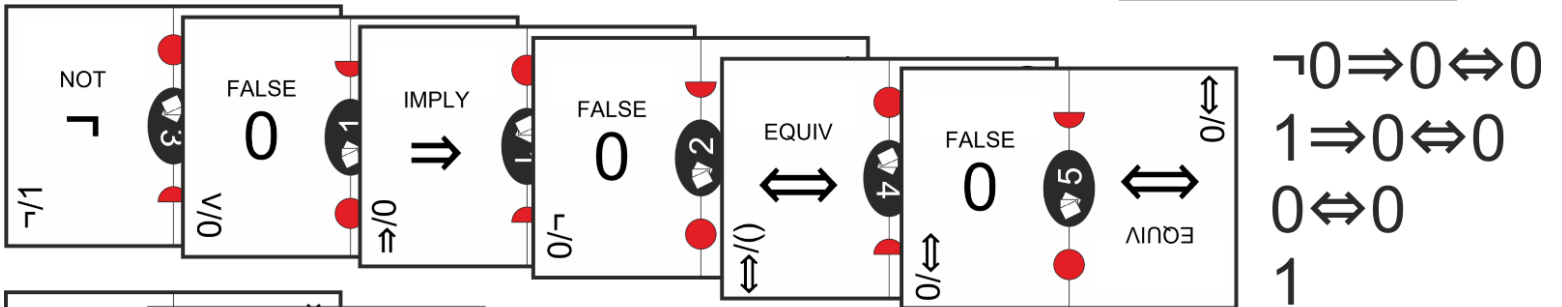
- Arithmetic
- Logic
- Mechanics



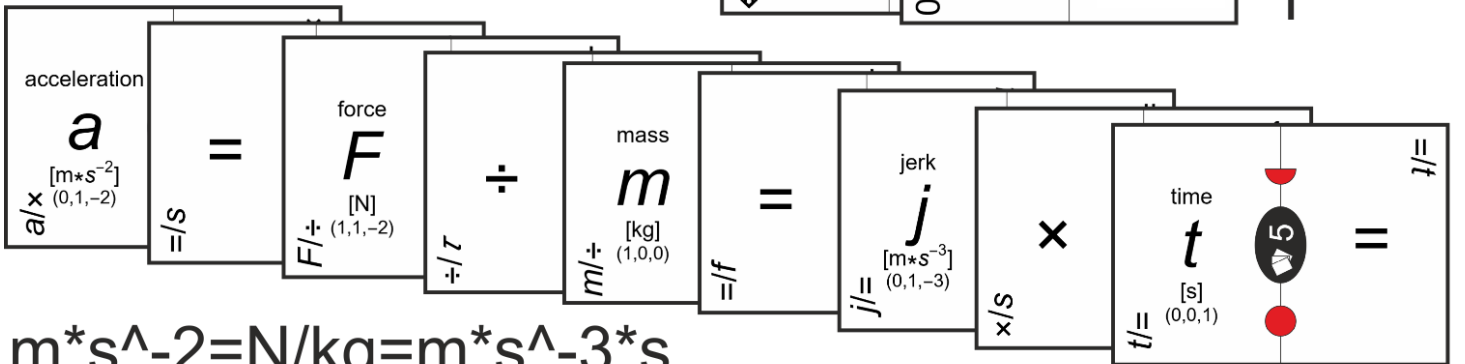
$$81-79=2$$

## Under development

- Optics
- Quantum computing
- Symmetry



$$\begin{array}{l} \neg 0 \Rightarrow 0 \Leftrightarrow 0 \\ 1 \Rightarrow 0 \Leftrightarrow 0 \\ 0 \Leftrightarrow 0 \\ 1 \end{array}$$



$$m \cdot s^{-2} = N/kg = m \cdot s^{-3} \cdot s$$

# Evolution of Sci-Me!



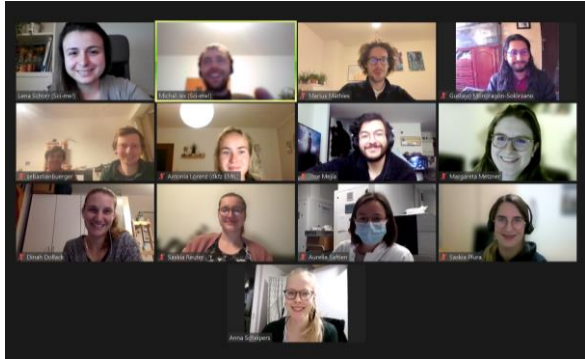
- September 2021 – Online Sciathon 2021 – honourable mention
  - initial concept
- December 2021 – First digital prototype
- 2022 – online playtesting
- Spring 2023 – grant from British Council
  - production of first physical prototypes
- October 2023 – presentation at Spiel
- December 2023 – testing of card version at Life Science Lab (DKFZ-Heidelberg)
- June 2024 – card game published for Heidelberg Laureate Forum Foundation



# Evolution of Sci-Me!



## Online Testplays



## Physical Testplays



## Testplay with the Life Science Lab Heidelberg



## CTU events for elementary schools



## Lectures





# Thank you for your attention!



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  - <https://sci-me.jimdosite.com/>
- Link to digital prototype:

