DIGITAL SCIENCE COMMUNICATION

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GOETHE UNIVERSITÄT FRANKFURT AM MAIN

HFHF Helmholtz Forschungsakademie Hessen für FAIR

Thoughts about

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How did I get into all of this?!

- Professor of Theoretical Physics
- Been on the Board of Directors of some Institutes
- Head of some current and past large scale research/networking projects

Did SciCom from two different perspectives:

- Doing it myself
  - Night of Science, public talks, acquisition of sponsors, policy advise
- Hiring people to do it for me (well, the projects)
  - Films, blogs, newsletters, events

What I learned...

Make it more simple

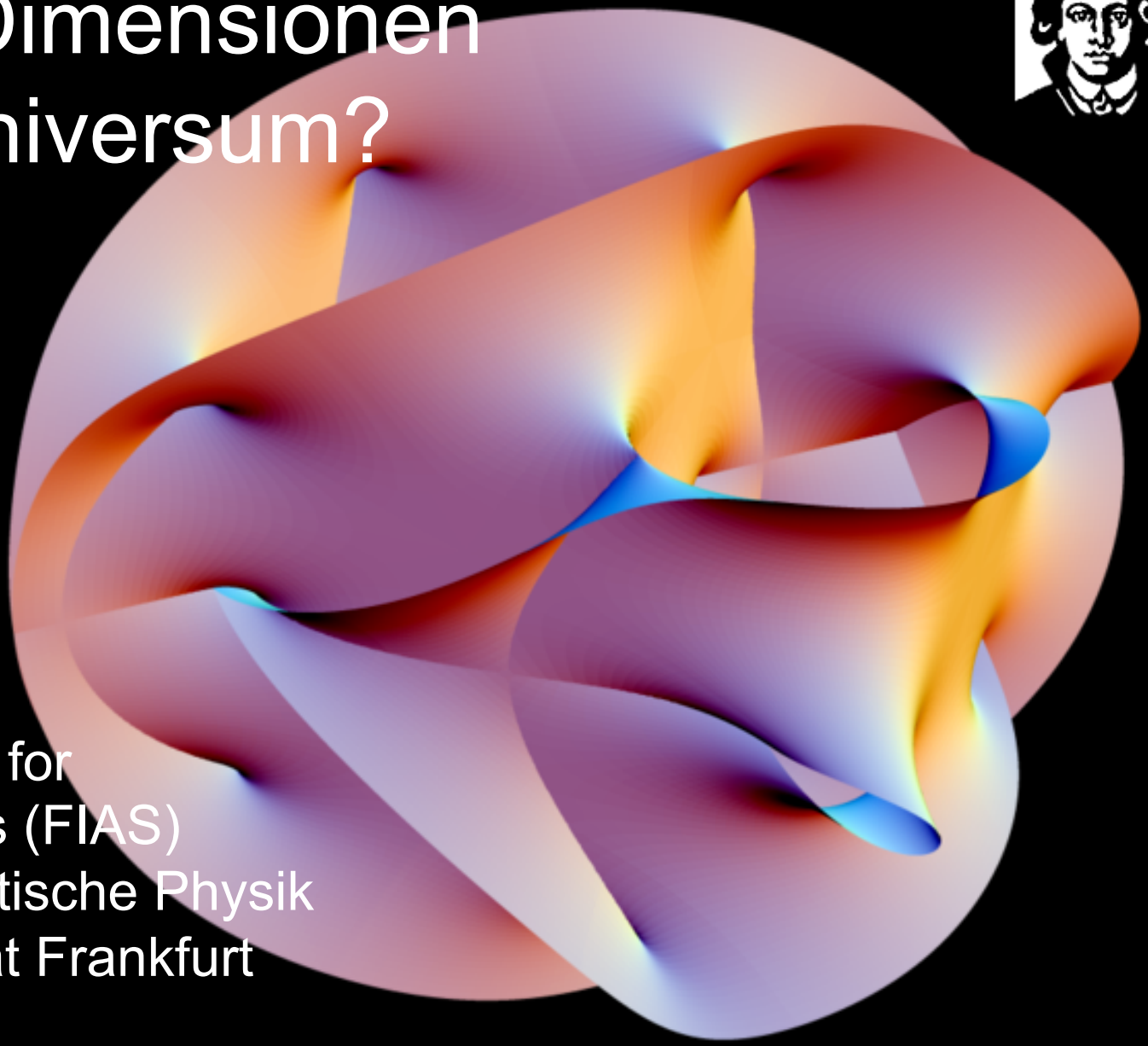
What I learned...

Even more simple

What I learned...

Now really really simplify it!

Wieviele Dimensionen hat das Universum?



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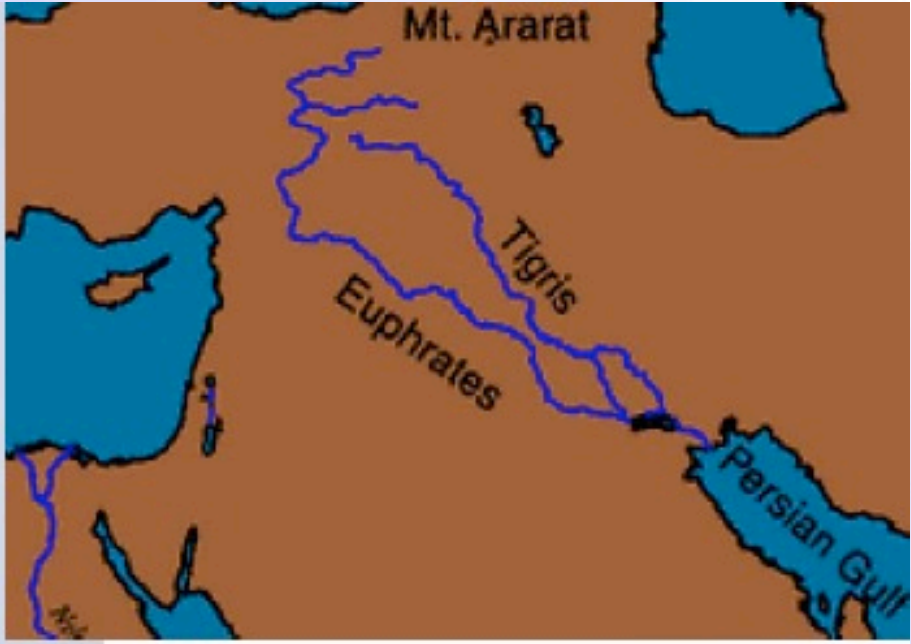
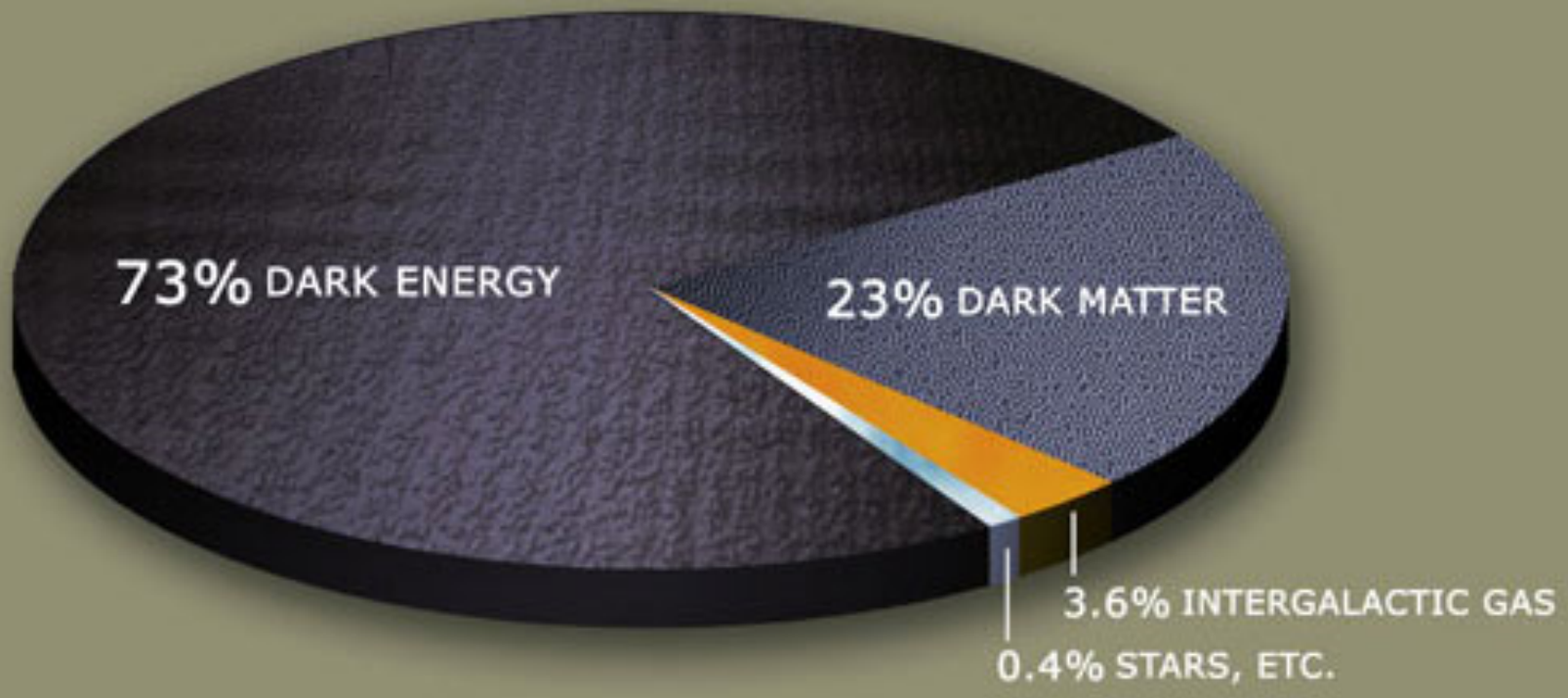
von C. Tsallis



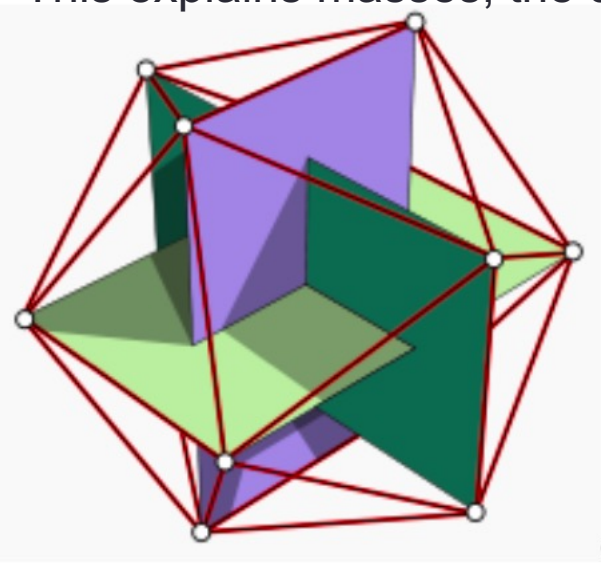
King Thutmosis III
18th Dynasty
c. 1460 B. C.

Was wissen wir?



Beware of being too simple...
Or you may support the crackpots

From a long email I got shortly after this talk:
The orthogonality of the branes of our D4 spacetime can be represented in the form of a D3 icosahedron. This possible basic form of our spacetime can also explain the golden mean ratio in many natural processes.
....
This explains masses, the universe, everything...



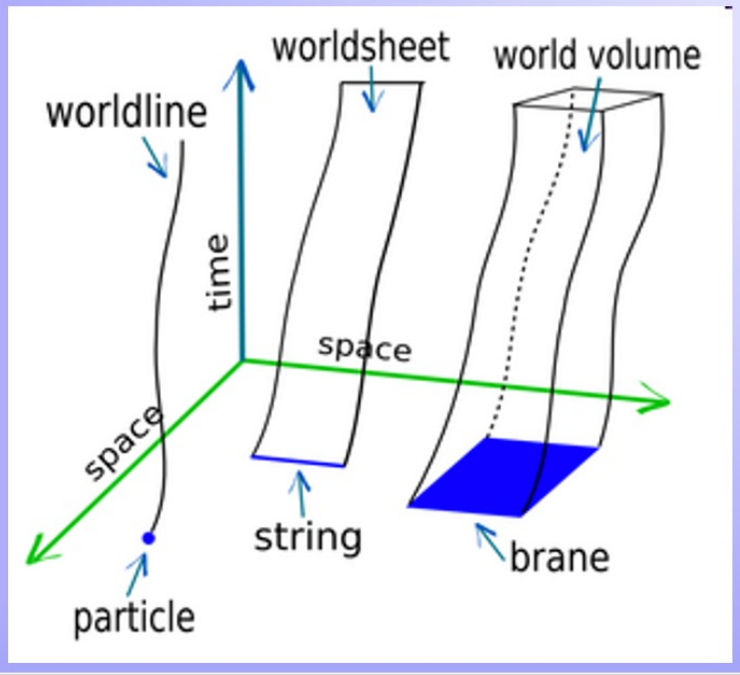
Quelle: wikipedia.de

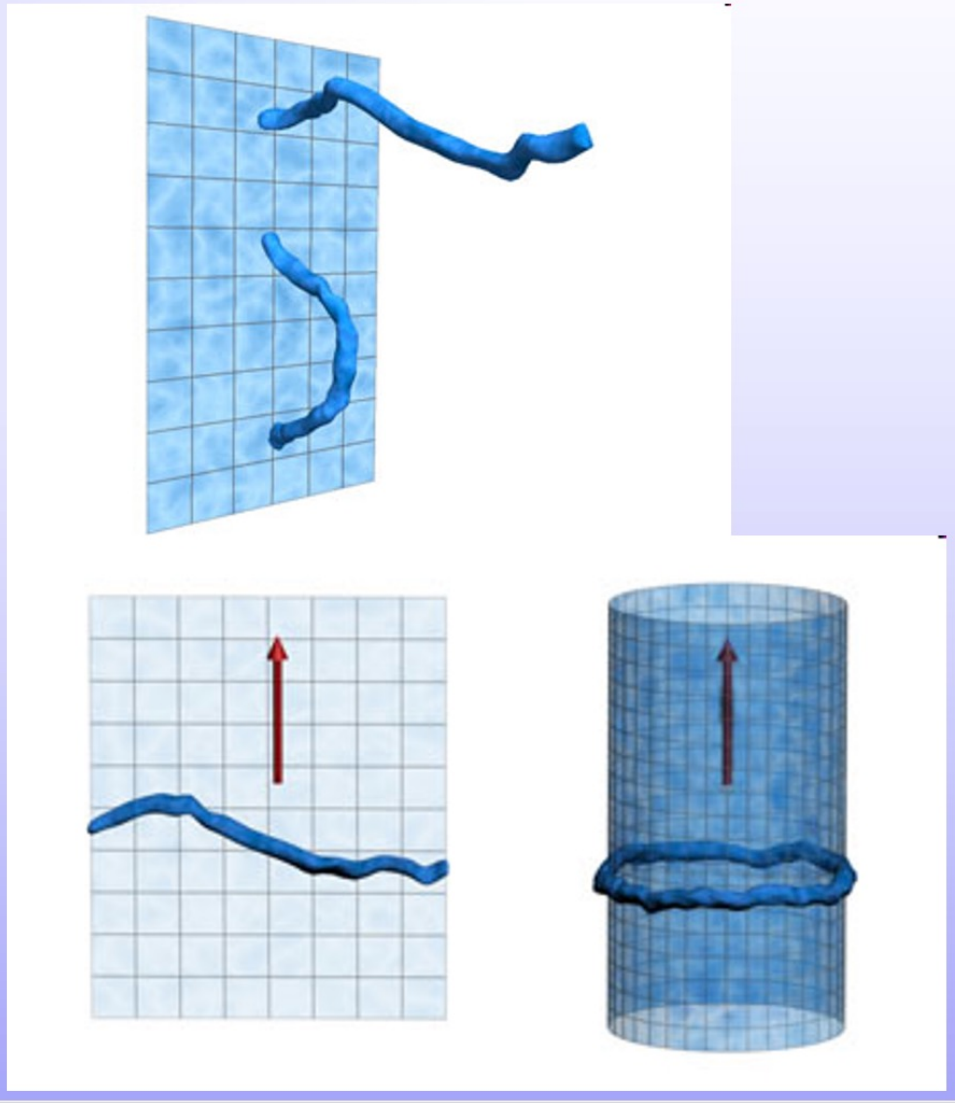
Die Idee der Strings

Entfernen der Unendlichkeiten!

Ramanujan Summe:
$1 + 2 + 3 + 4 + \cdots = -1/12$

→ Universum hat 24 Dimensionen





Lots of options, but also problems

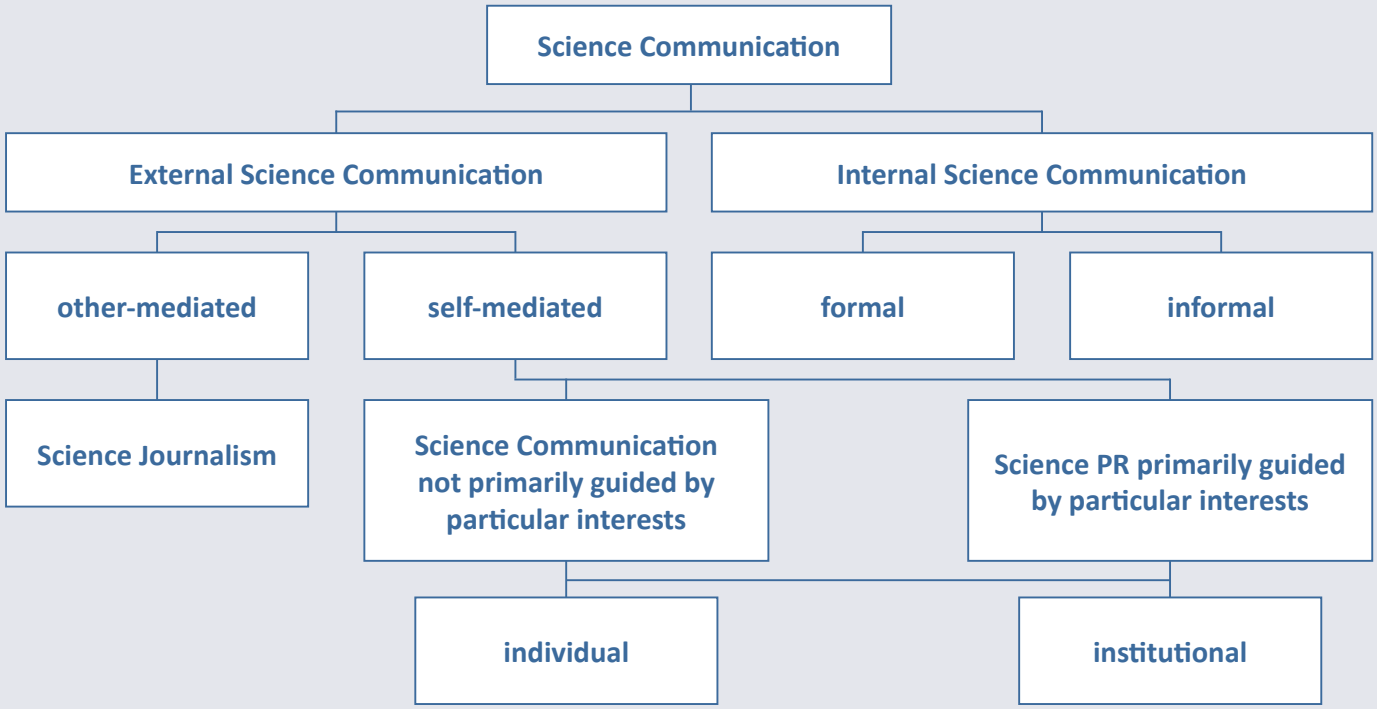


Figure 2: Traditional Taxonomy of Science Communication (Source: Beck/Dogruel 2016, 18)[27]

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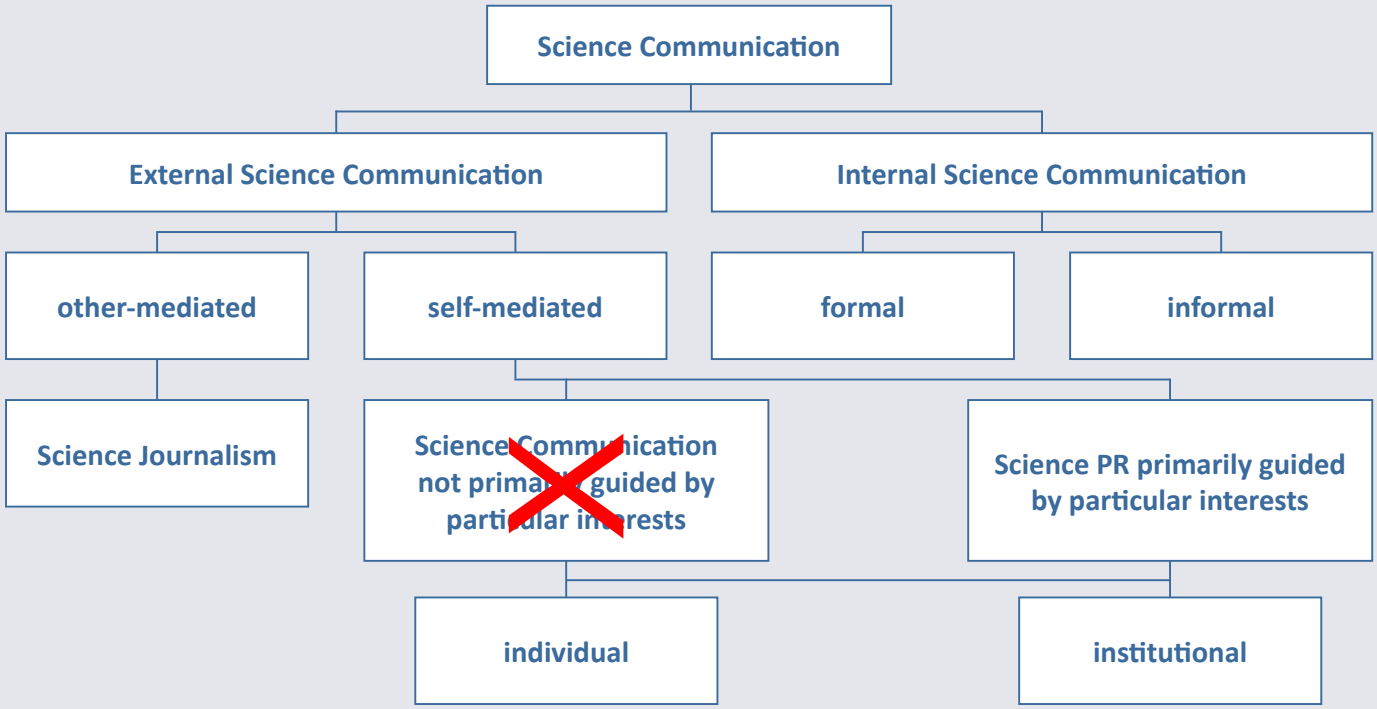

Figure 2: Traditional Taxonomy of Science Communication (Source: Beck/Dogruel 2016, 18)[27]

Realistically, SciCom without particular interests does not exist

Main question: are your interests „good“?

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But what is „good“?

Main question: are your interests „good“?

Is it „good“ to have an opinion?

Is it „good“ to be neutral?

Think about communicating topics like

- Continue running nuclear power plants vs. coal power (Climate Change?)
- Corona lockdown vs. potential loss of workplace (Cost of lives?)
- Religion vs. Science (Is there a place for religion in science?)
- Applied research vs. fundamental res. (results now or innovation for the future?)

Assume you are hired by one of the sides (you decide)
→ you have to have an opinion

Task: Short presentation to build „trust“ and convince the other public

How did you feel about your groups choice?

My personal conclusions on SciCom

- Try to focus on the positive things

- Less science facts more people interacting
- Stay neutral – promote the discussion
- Clearly separate your sales pitch from your real scientific work

- Always try to be a bit different!

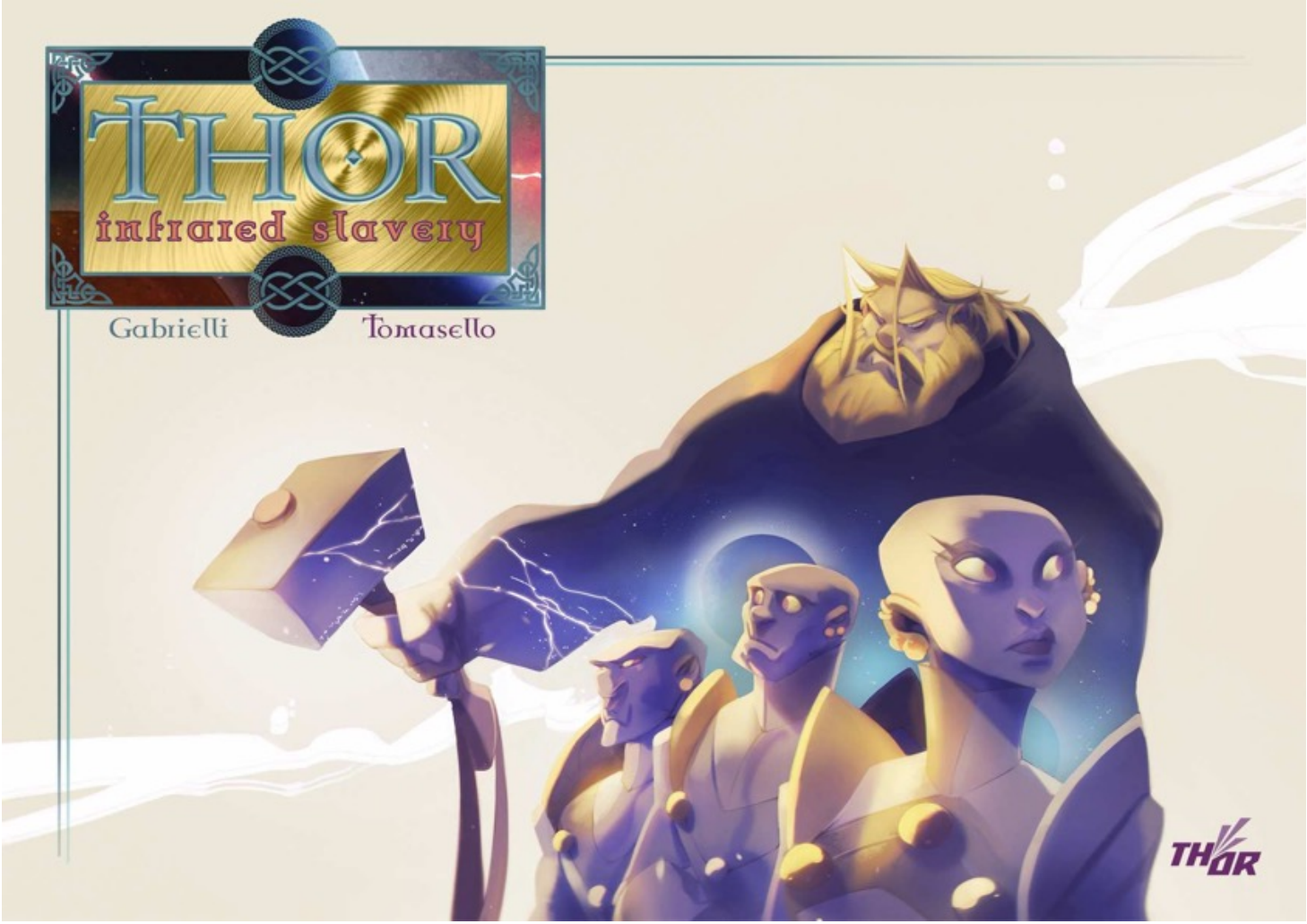
Two examples to exemplify what I mean

Both were done as part of the outreach of a

HORIZON 2020 COST Project called

“Theory of Heavy Ion Reaction” (THOR)

Comic for outreach to kids



https://thor-cost.eu/images/outreach/THOR_Cover-ENG-Low.pdf

The THOR final dissemination movie

Some times you need to be more serious

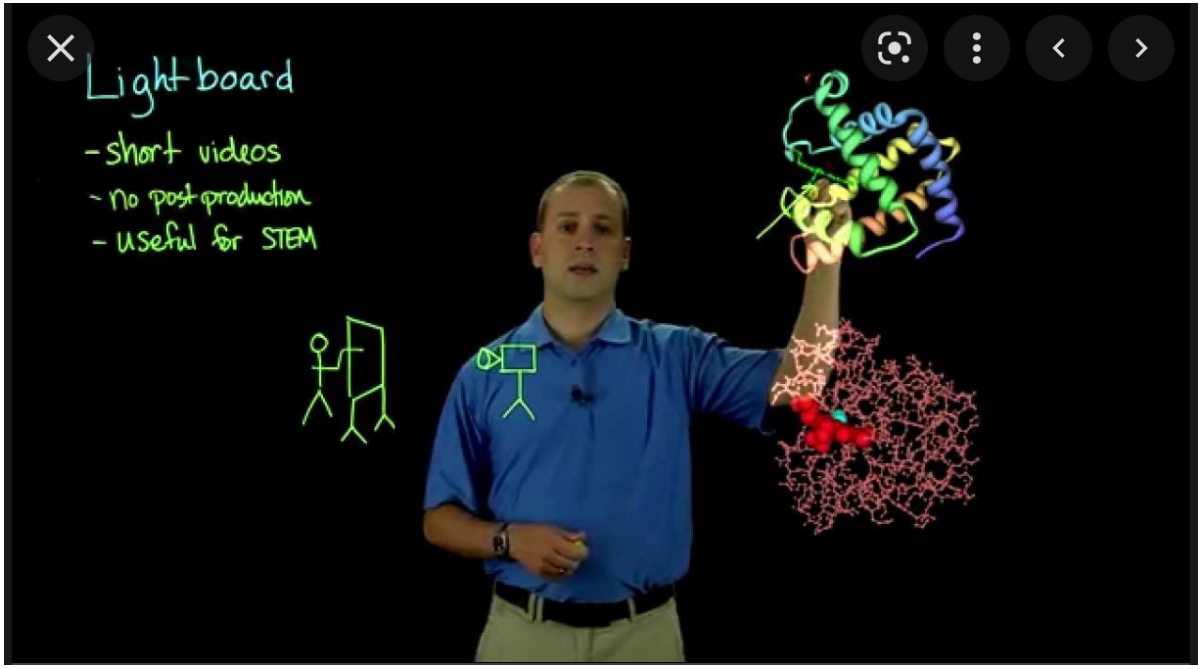
...when you want to talk about real science

Another alternative

Lightboard!

- Easy to use
- Lets you talk to the people
- Allows for cool effects

The best: You can build by yourself!



Taken from: University of Notre Dame

Hands-on session in basement