

**Second edition
of Cosmology in the Alps conference**

16 - 20 MARCH 2026
Les Diablerets, Hotel Glacier



Science Communication in our post-truth world

**Challenges
Opportunities
Best Practice**

Tanya Petersen, Head of Outreach and Communications, SKACH

01

Introduction

02

Why
Communicate
Science?

03

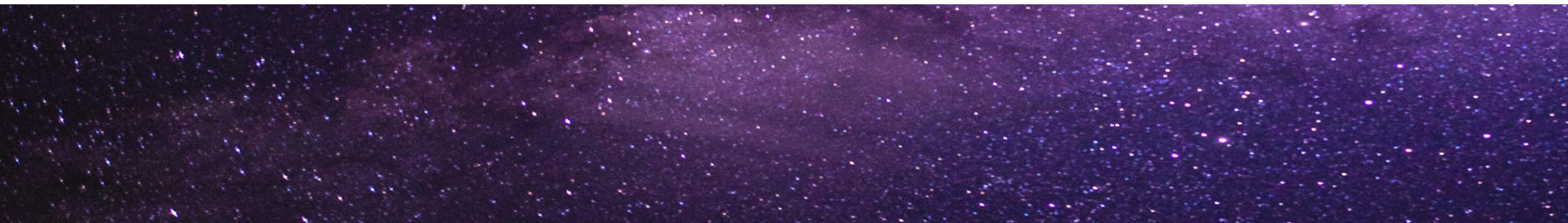
Post-truth and
other science
communication
challenges

04

Science
communication
best practice

05

Recap &
takeaways





If a tree falls in the forest and nobody hears it, does it make a sound?

Why should we communicate science?



**Fostering Informed
Decisions**



**Promoting Scientific
Literacy**

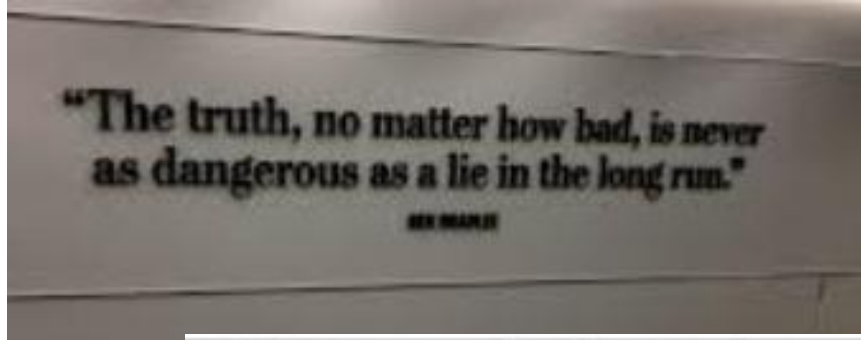


**Building Trust in
Science**

Funding



Science in today's post-truth world



Who needs facts in a post-truth world?

As Poland continues to blame Russia for president's air crash, it's clear conspiracy theories are no longer just for crackpots



What happens when facts lose their powers of persuasion?

It's been said that a lie can travel half-way around the world while the truth is putting its shoes on.

Additional challenges to communicating science

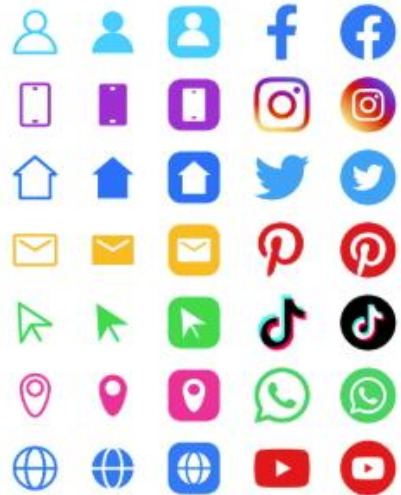


- Misinformation and Disinformation
- Complexity of scientific concepts
- Open science and the proliferation of scientific publishing
- Time constraints and lack of training

The communications landscape today



Is AI Changing Everything?



A social media world run by algorithms!



Fun Fact #1

Five billion people around the world are on social media with the average user online for about three hours daily, scrolling around 400 meters a day on their feeds.

Fun Fact #2

54% of Americans get their news from social media and influencers, for the first time more than get their news and information from traditional TV networks (50%). 6% get it from newspapers.

Fun Fact #3

40% of those surveyed say they are active 'news avoiders', the highest figure ever recorded.





- Up to 15% of tweets are AI generated but research suggests they could be responsible for up to 30% of shared content
- Twitter is a 'ghost town' of bots that like and talk to other bots
- This "zombie content" is designed to game algorithms and scam humans



- AI-generated pins are now dominating people's feeds
- Users report 80% of the results are AI-generated images
- This AI slop often links to AI-powered content-farming sites that result in SEO spammers profiting off the display ads attached to these content-farming pages.



- Nearly one in 10 of the fastest growing channels globally consist of mass-produced, surreal AI-generated videos
- Most popular video genres include cat soap operas and babies in space
- YouTube has become a "dumping ground for disturbing, soulless AI shorts"

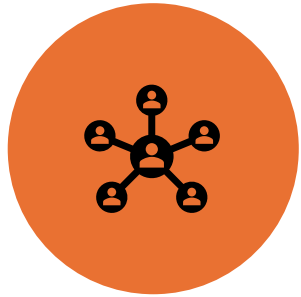
This is the next wave of internet "enshittification" a term coined by the British-Canadian author Cory Doctorow in 2022 to describe the decline of users' online experiences as platforms prioritize profit over content quality.

What's next?

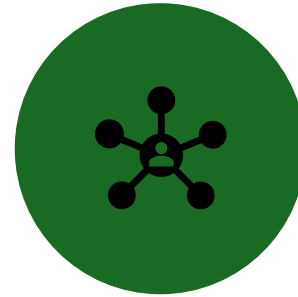
- **AI Transforming Personalized Communication** - for the creation of highly targeted and tailored communication strategies
- **AI Use in Language Translation** - bridging the communication gap between different languages allowing researchers and businesses to share knowledge and resources more efficiently
- **Automated Communication Through AI** – chatbots are offering 24/7 support and automated assistance potentially changing how we access information



But... this AI technology also raises concerns



What about the role of human connection in communication – is it irreplicable?



Effective communication is not just about transmitting information but also relies on empathy, understanding, and shared experiences. Can AI replicate the nuances of human interaction?



Biases in the data used to train AI models may lead to discriminatory or misleading communication and communication practices



How can we guarantee transparency, fairness and accountability? But can we guarantee this with humans?

The most realistic voice AI platform

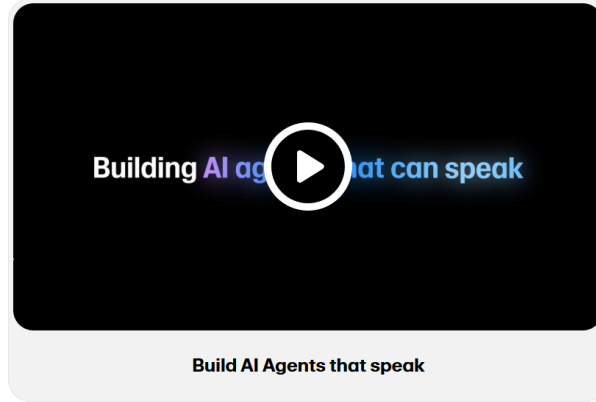
Over 1,000,000 creative minds use ElevenLabs to create realistic voice experiences.

GET STARTED FREE TALK TO SALES

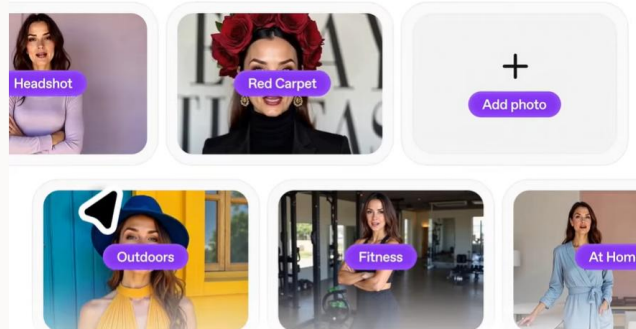
No credit card required • Cancel anytime



CONVERSATIONAL AI TEXT TO SPEECH VOICE CLONING SPEECH TO TEXT DUBBING



AI Video and content development



Camera Pan + Avatar walks, gesturing to the wildlife around

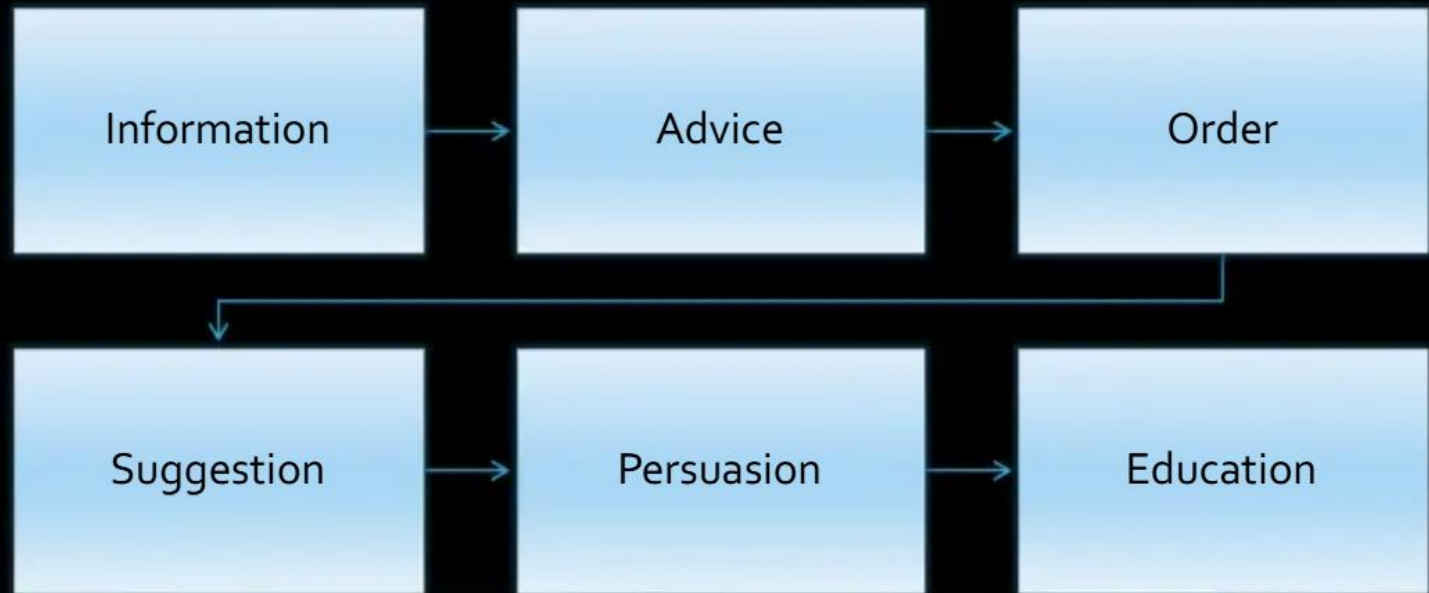
“Science is not finished until it’s communicated,”
Mark Walport,
former UK Chief
Scientist.

Re-building ‘Brand Science’

KYO – Know your objectives

- Why do you want to communicate?
- What will success look like for you?
- How will you measure this?

Objectives of Communication



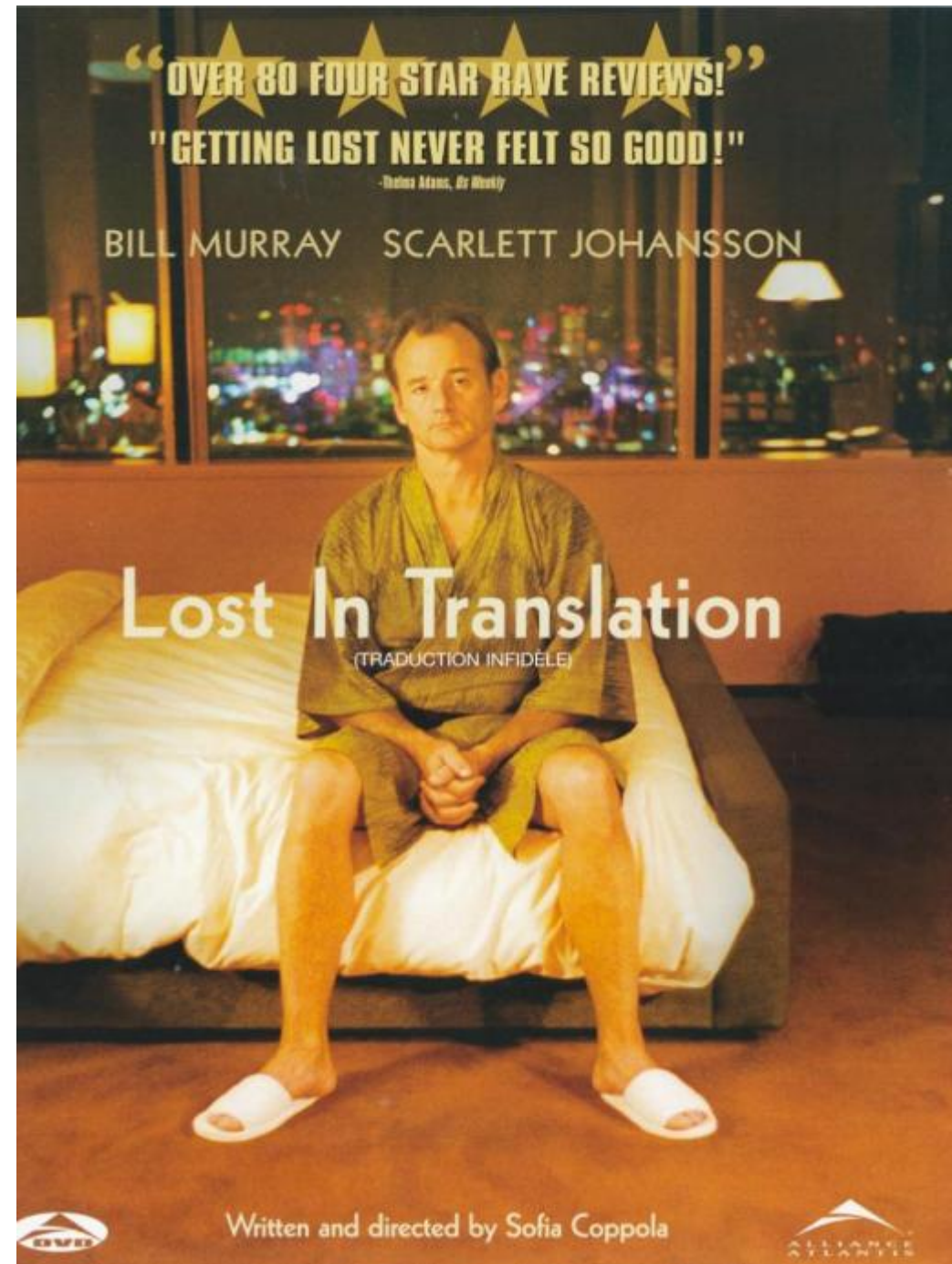
KYA - Know your Audience



- Who do you want to talk to?
- Why?
- What do you want them to know/do?
- What do they need to know about your research?

Key messages

- What are the key things your audience needs to know?
- Have you avoided jargon?
- Are your key messages suitable for non-experts to easily grasp?





Tell a story

- Storyboard
- Story Mountain
- Engaging narrative

Choose the right channels



Effective communication is about delivering the right messages to the right people at the right time and in the right place



Stunning Science Communication



nature



These researchers spent a winter trapped in Arctic ice to capture key climate data

By Shannon Hall
22 May 2020



The *Polarstern* on 27 December 2019, nearly three months after it was frozen into Arctic pack ice. Credit: Lukas Piotrowski

<https://www.nature.com/immersive/d41586-020-01446-x/index.html>

Stunning Science Communication



Dr Robert Laidlow, Career Development Fellow in Music at Jesus, has created a symphonic work titled *'Exoplanets'* following an informal discussion with Professor Ray Pierrehumbert, Senior Research Fellow in Physics, about his interdisciplinary research to understand the climates, atmospheres, surfaces, interiors, dynamics, formation, evolution, and habitability on the many worlds both in our solar system, and throughout our galaxy.

Astrophysics inspired, AI aided symphony



Comicons: Sci-Fi meets Sci-Fact!



Conclusion



Key learnings

- 1. Very few people will know about your science unless you communicate it**
- 2. Never forget the context of how communication works now in 2025 – a complex landscape with hyper competition for eyeballs**
- 3. Design your communication around the 5 ‘W’s’: Why, Who, What, Where, When**
- 4. Tell a story**
- 5. Don’t be afraid to push boundaries, like you do in research**
- 6. Have fun!**