

# LLM-Generated or Human-Written? Comparing Review and Non-Review Papers on ArXiv

June 30th, 2026, ICSSSI



Yanai Elazar



# **LLM-Generated or Human-Written?**

## **Comparing Review and Non-Review Papers on ArXiv**

**Yanai Elazar**

Bar-Ilan University  
yanaiela@gmail.com

**Maria Antoniak**

University of Colorado Boulder  
maria.antoniak@colorado.edu

# October 31, 2025

[Blog Home](#)[arXiv Home](#)[About](#)

[Home](#) / [2025](#) / [October](#) 📅 / [31](#) 📅 /

## Attention Authors: Updated Practice for Review Articles and Position Papers in arXiv CS Category

---

👤 By [Kat Boboris](#) 📅 October 31, 2025 📁 [about arXiv](#), [arXiv updates](#), [moderation](#) 💬 [9 Comments](#) 📝









Did you see the new  
arXiv policy?





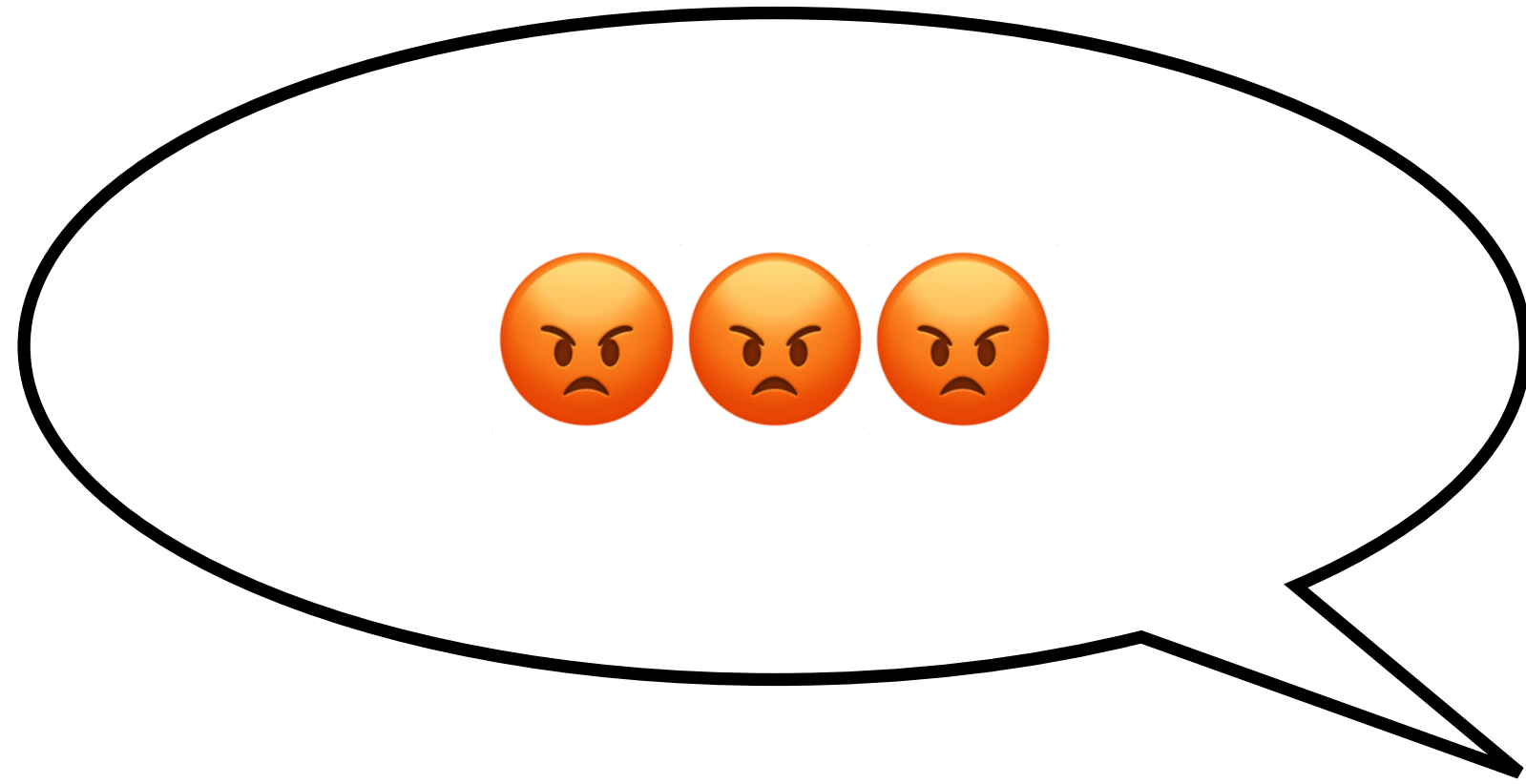
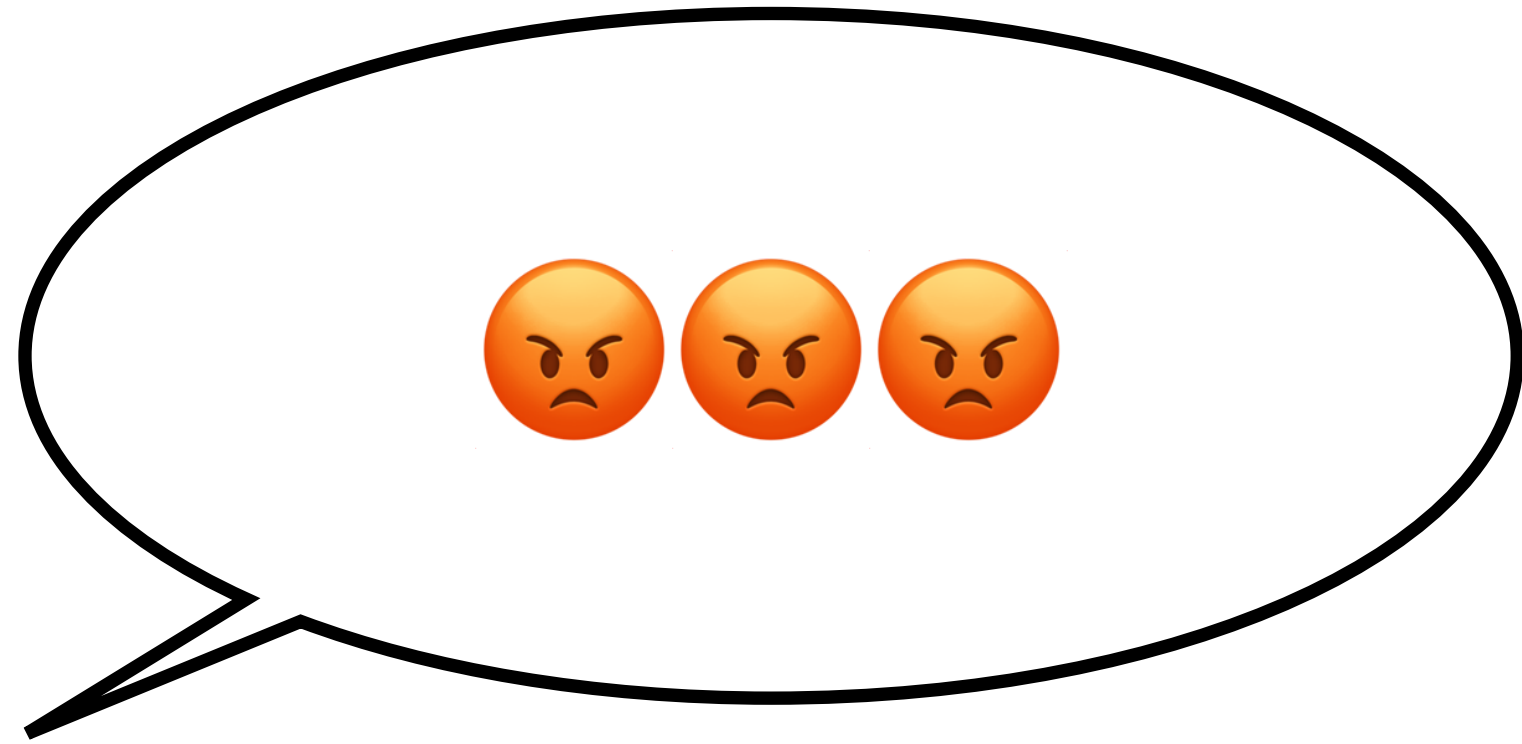


Did you see the new  
arXiv policy?

Yes, I have thoughts...











Where's the evidence?







Where's the evidence?

It seems to be missing!







Are there actually more AI  
generated opinion papers?







Are there actually more AI  
generated opinion papers?

What is an opinion paper  
anyways???







Let's check!

Let's check!



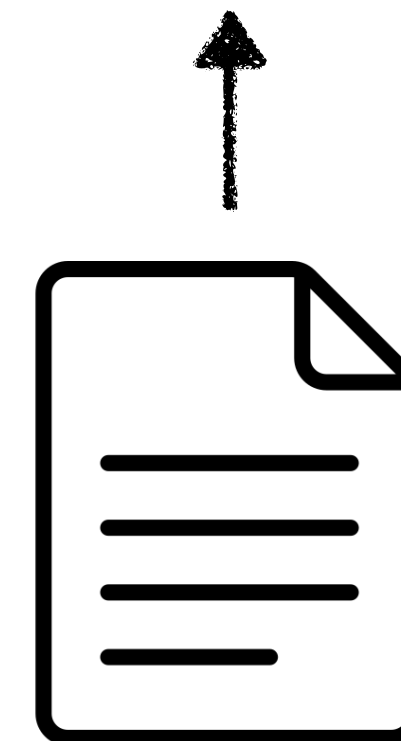


# Two Components

Human vs. LLM



Opinion vs. non-Opinion

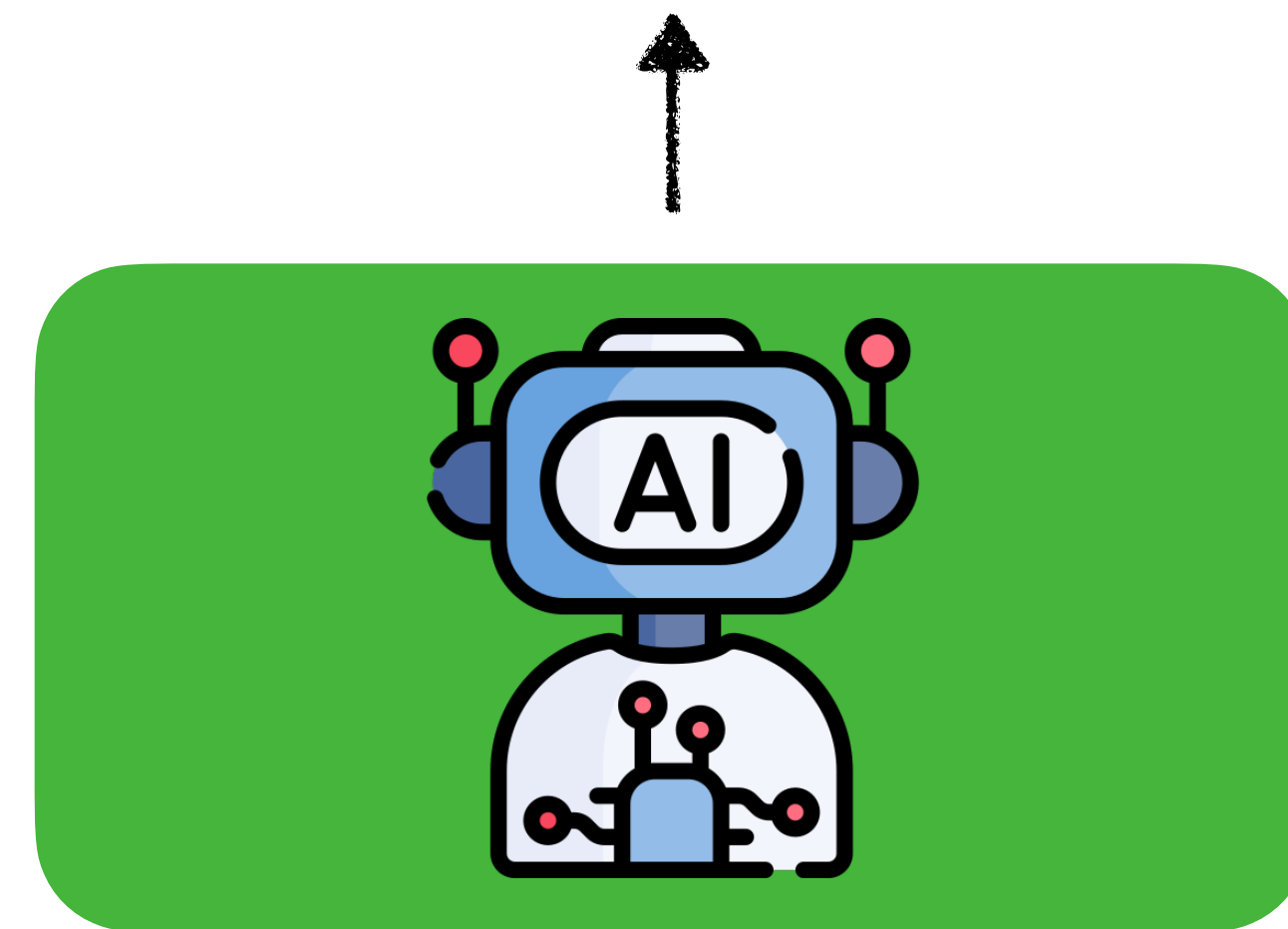


# Two Components

Human vs. LLM



Opinion vs. non-Opinion

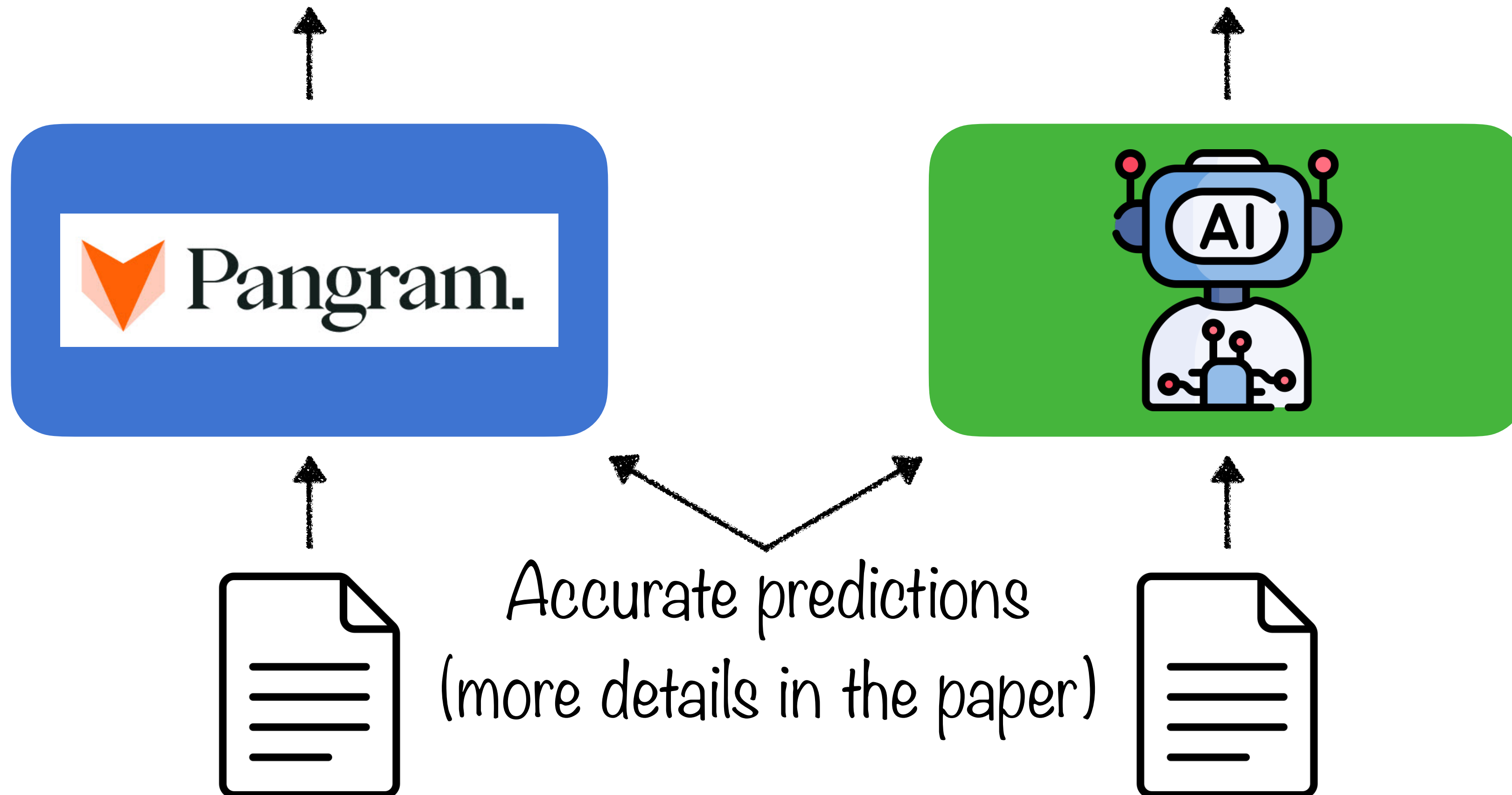




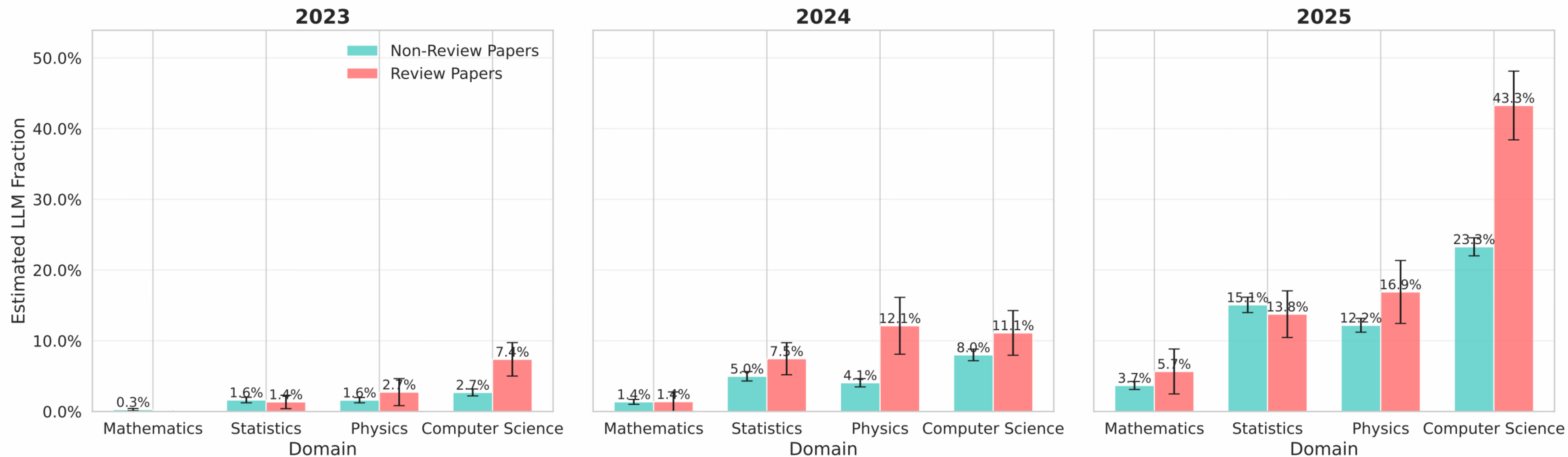
# Two Components

Human vs. LLM

Opinion vs. non-Opinion



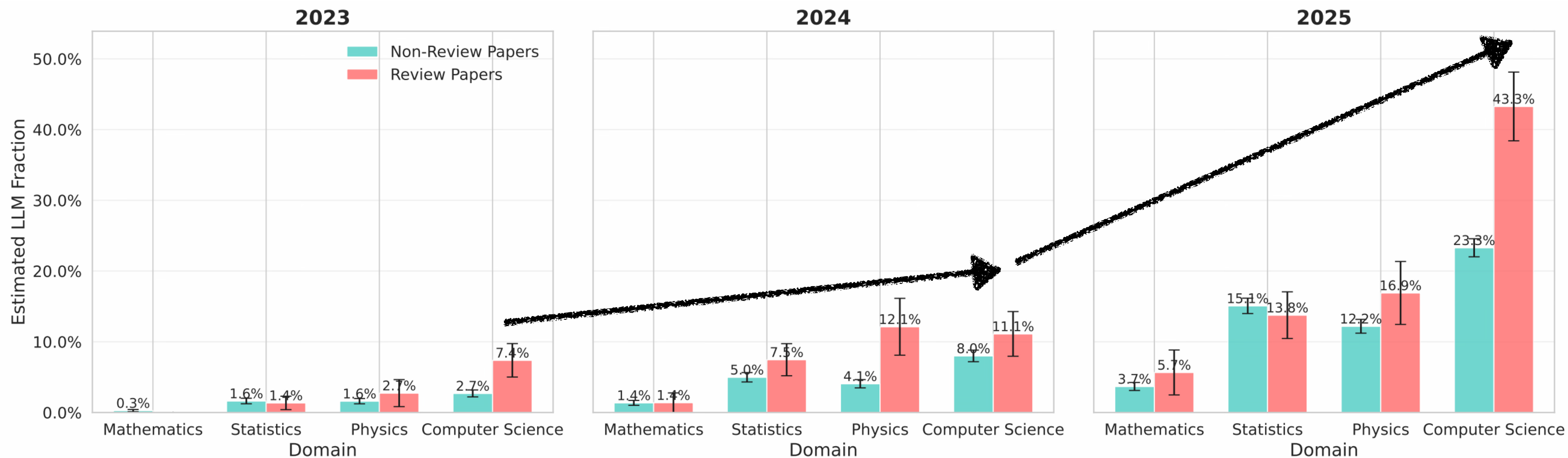
# Generated articles has risen!



Pangram ratios.

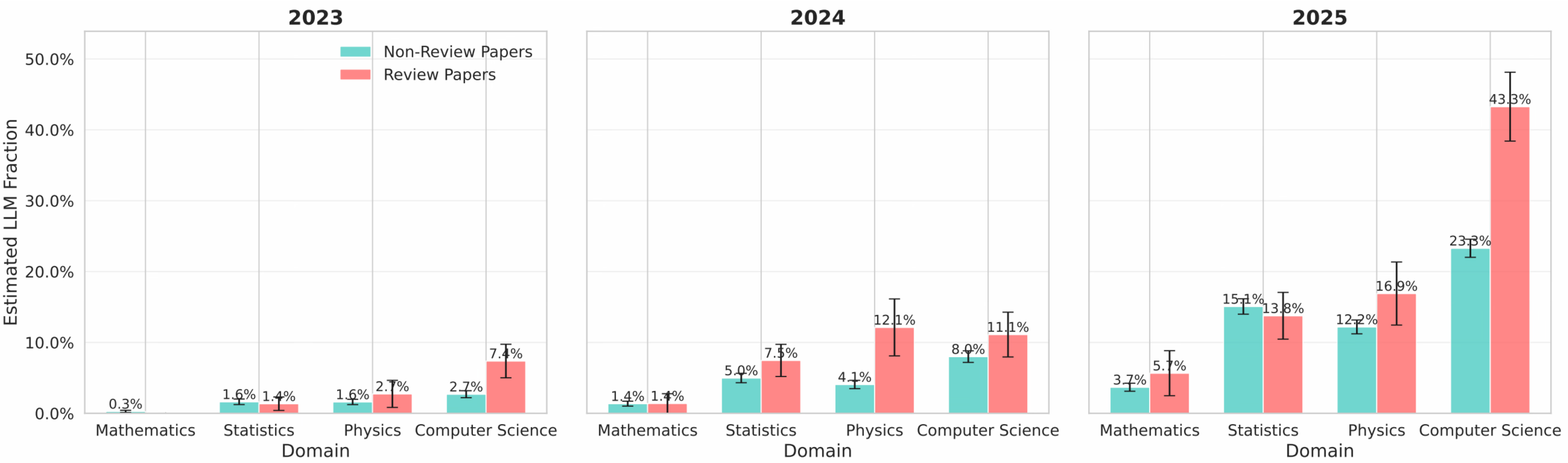


# Generated articles has risen!



Pangram ratios.

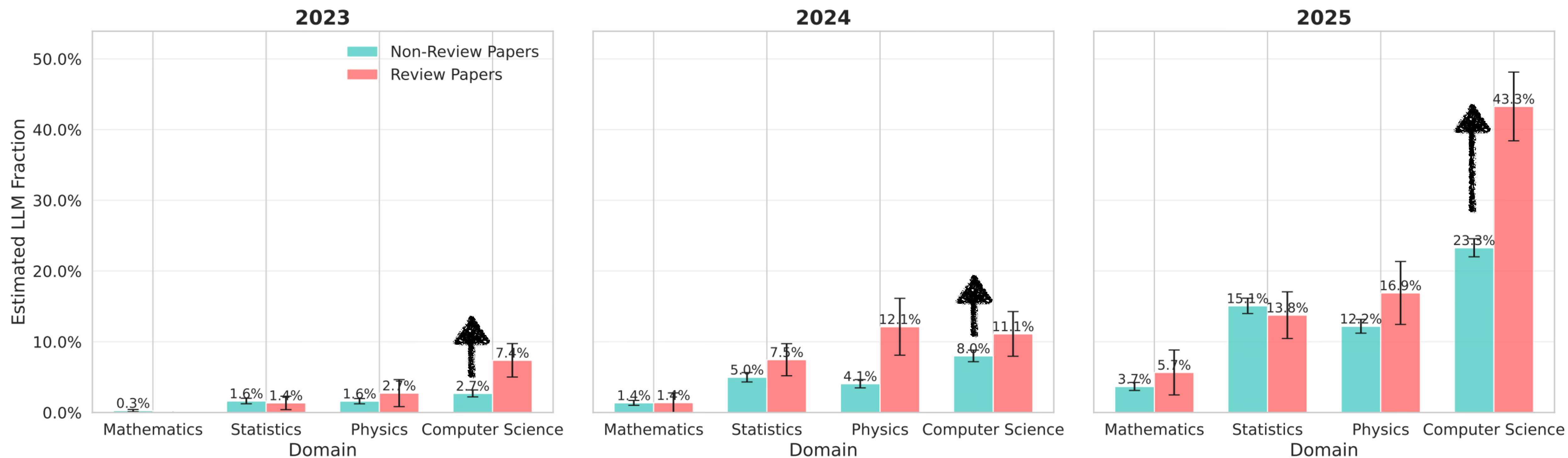
# Gap in LLM-generated papers in Reviews vs. Non-reviews



Pangram ratios.

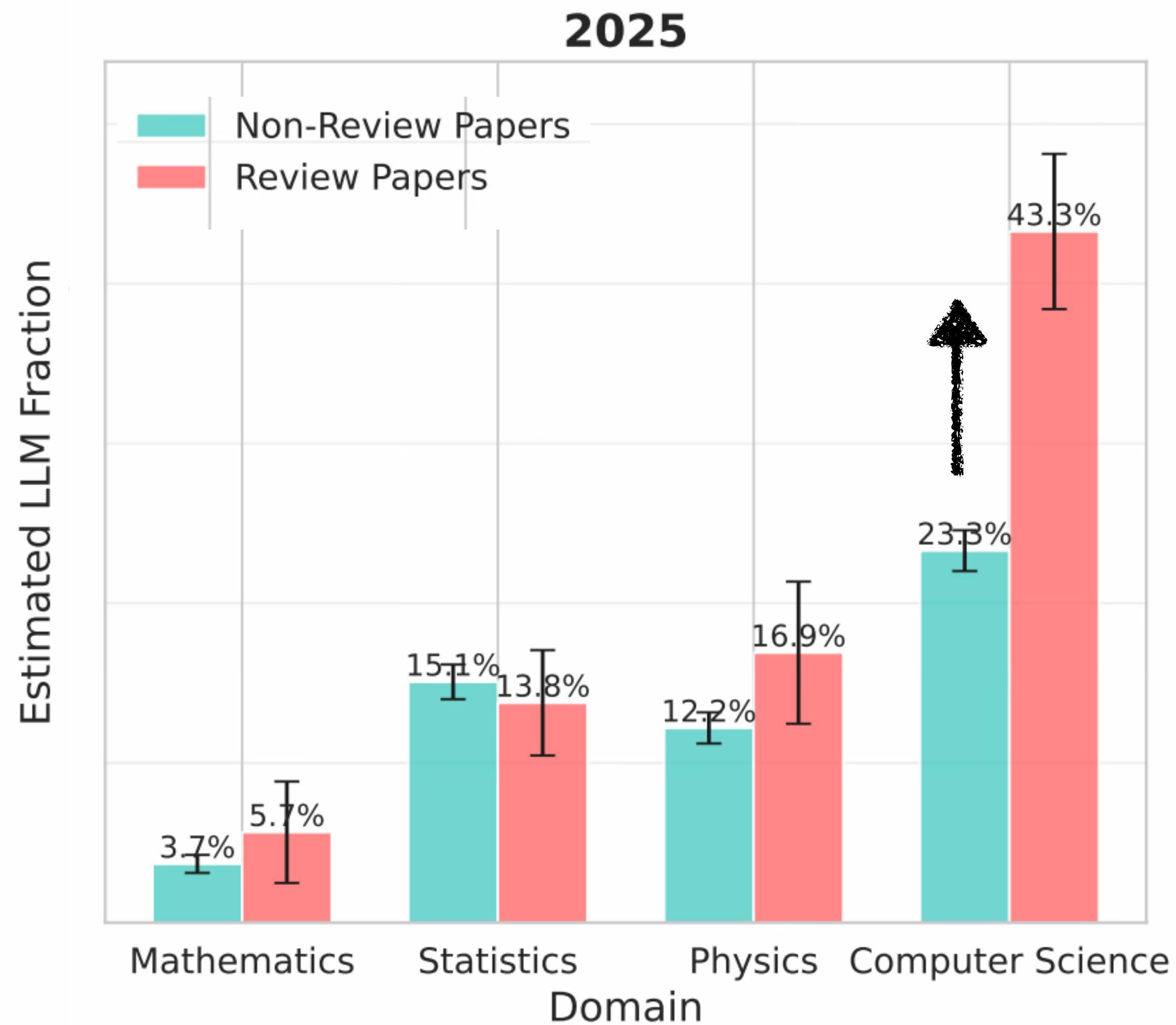


# Gap in LLM-generated papers in Reviews vs. Non-reviews



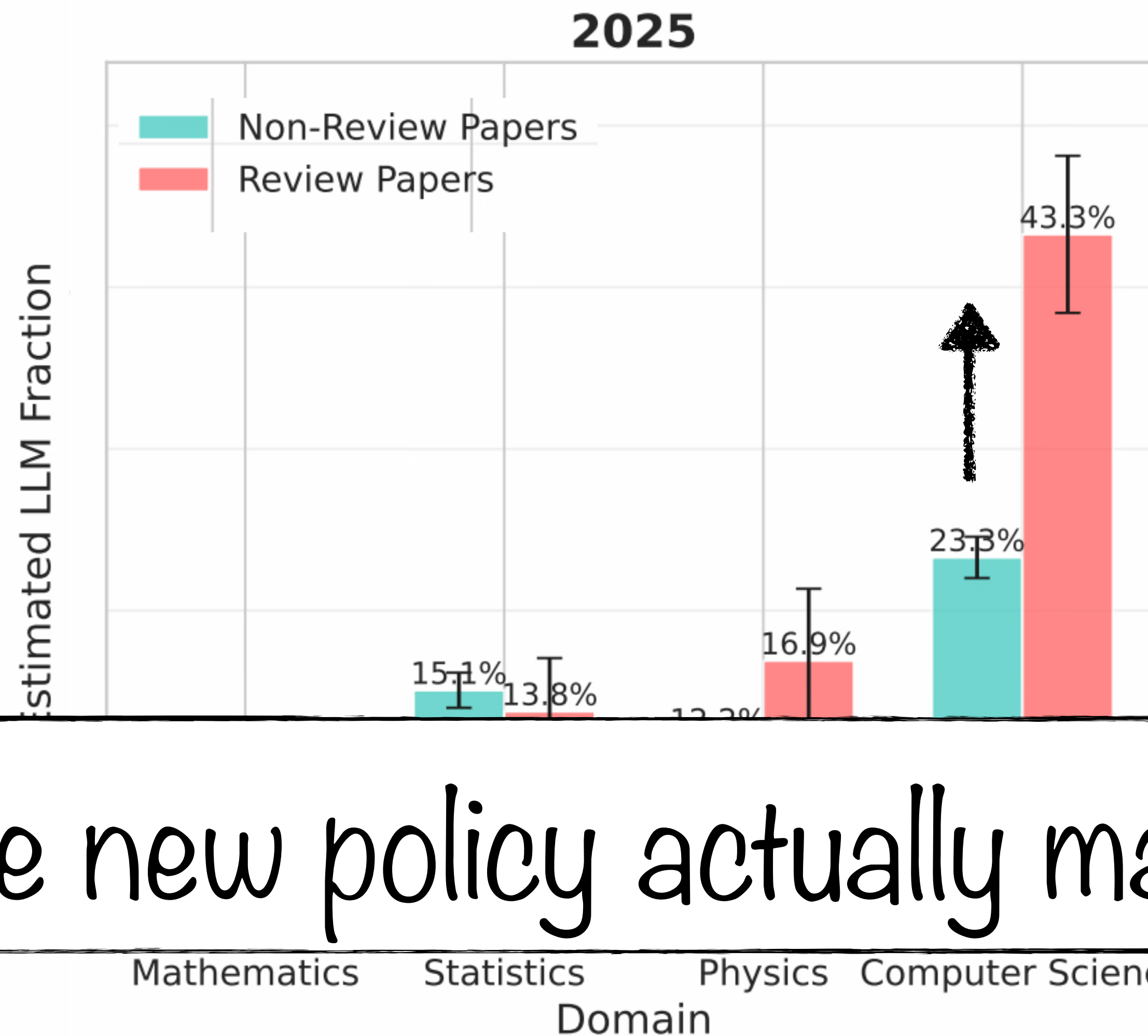
Pangram ratios.

# So many 'review' LLM papers



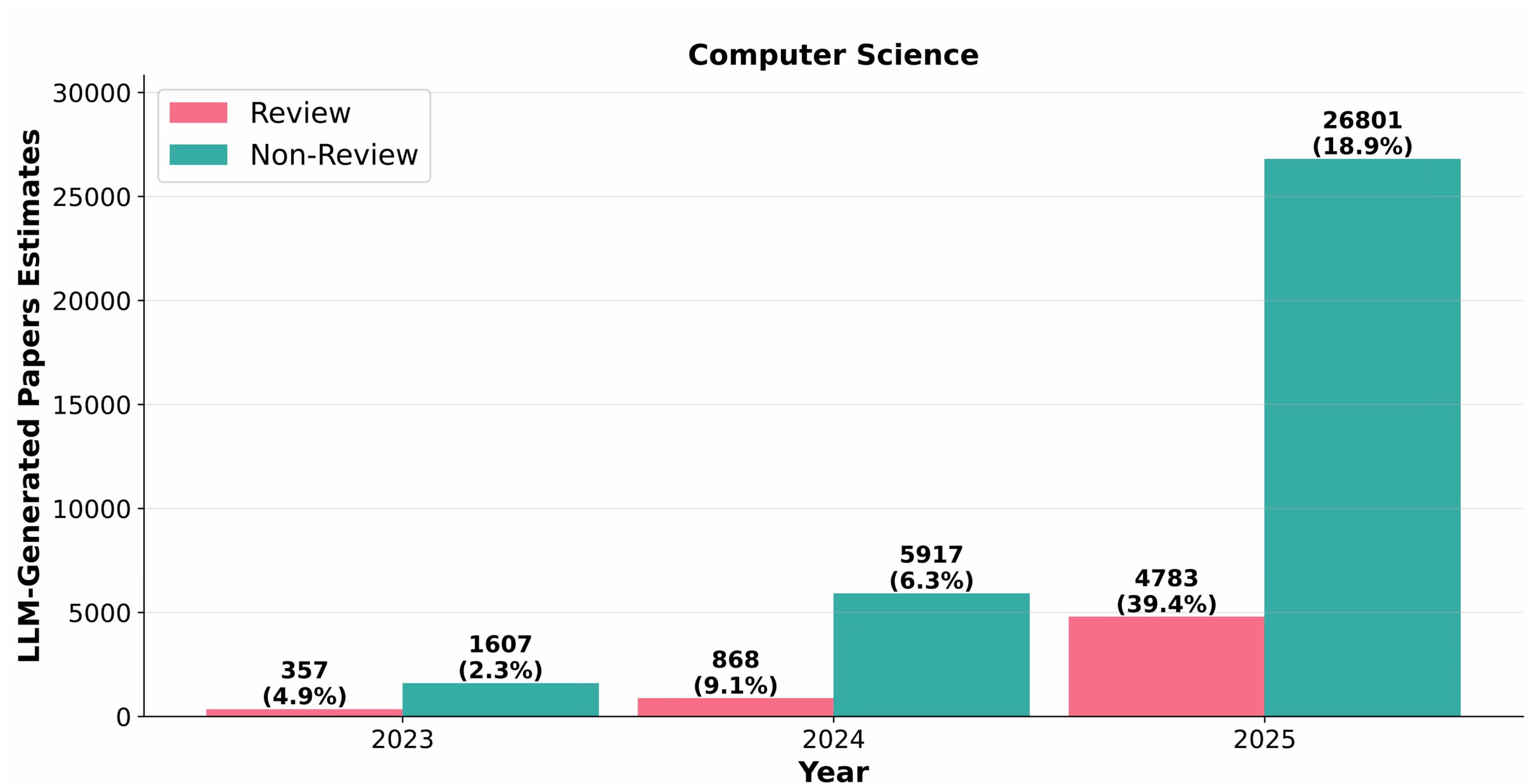


# So many 'review' LLM papers

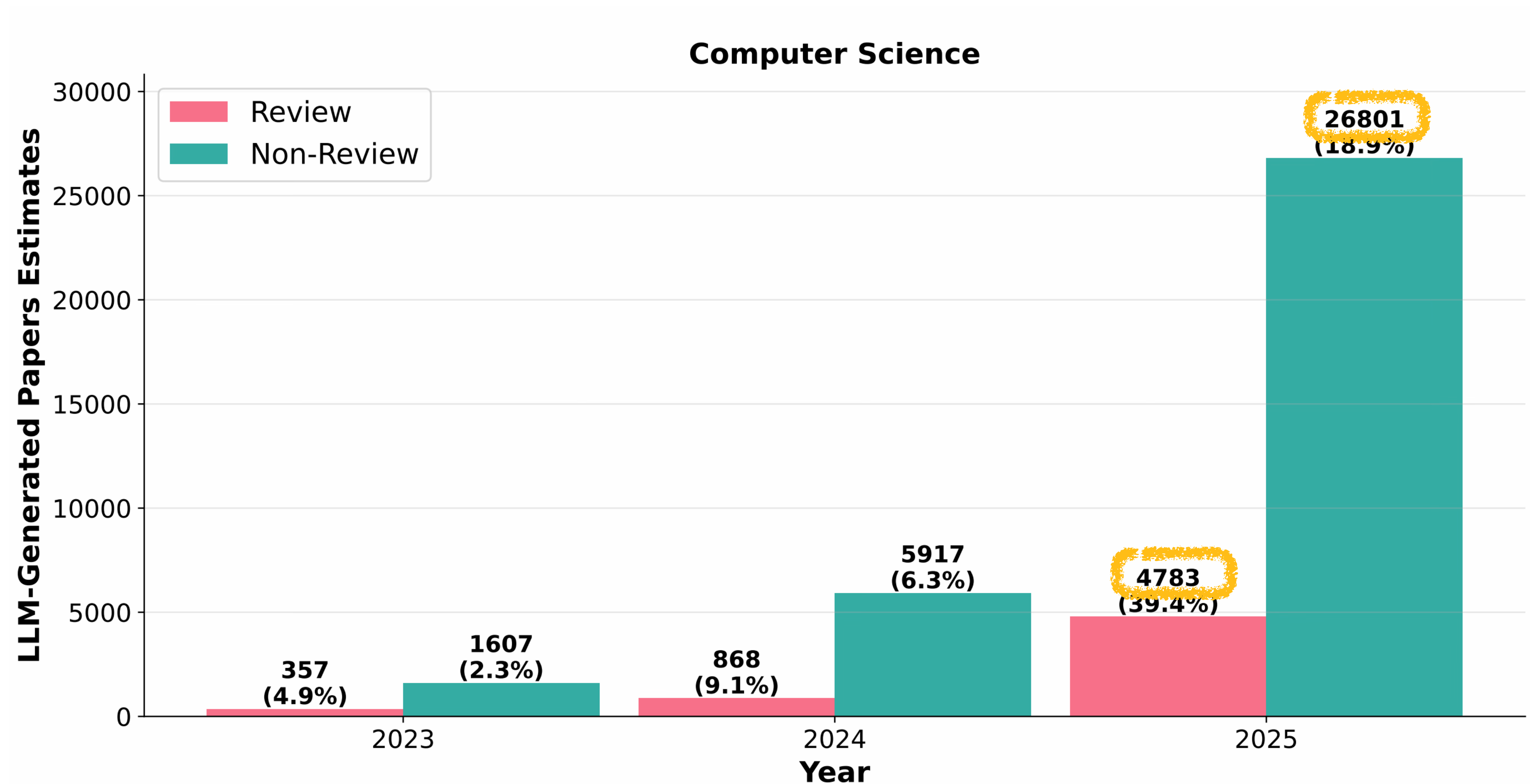


Does the new policy actually make sense?

# Total number of papers tells a different story

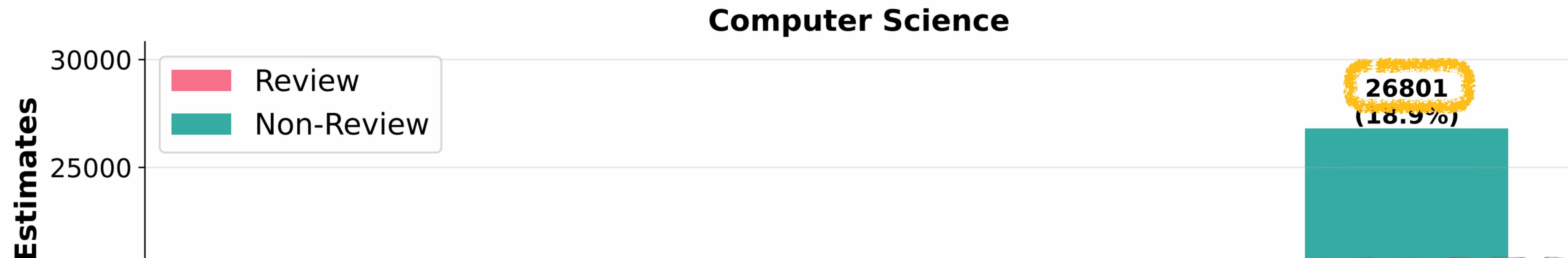


# Total number of papers tells a different story

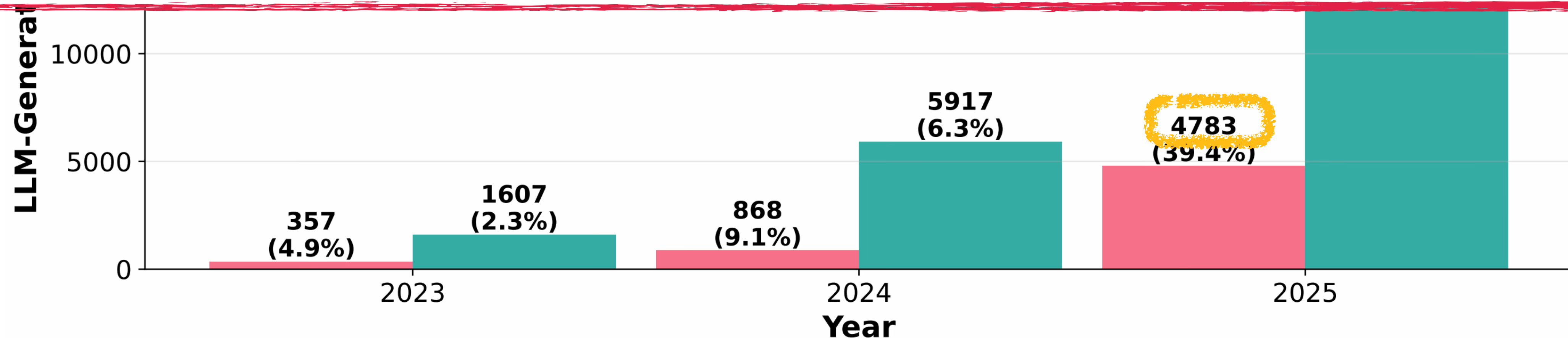




# Total number of papers tells a different story



We would better be off banning 'non-review' papers



# Are 'review' papers created equally?

| Category                | Review Rate | AI Rate |
|-------------------------|-------------|---------|
| Computers & Society     | 49.2%       | 20.2%   |
| Software Engineering    | 23.4%       | 10.6%   |
| HCI                     | 23.3%       | 11.3%   |
| AI                      | 15.8%       | 13.0%   |
| Cryptography & Security | 15.2%       | 13.8%   |
| Information Retrieval   | 13.4%       | 7.8%    |
| Computation & Language  | 9.4%        | 8.8%    |
| Machine Learning        | 5.7%        | 9.9%    |
| Robotics                | 3.7%        | 6.7%    |
| Computer Vision         | 2.4%        | 7.0%    |

arXiv is great, don't ruine it!

- Academia is changing, we need to adapt



arXiv is great, don't ruine it!

- Academia is changing, we need to adapt
- Policy should be backed up with data!

# arXiv is great, don't ruine it!

- Academia is changing, we need to adapt
- Policy should be backed up with data!
- Sub-communities have different norms

Thanks!

Preprint (on arXiv)



✉ yanaiela@gmail.com

🐦 @yanaiela