

## **Codebook I**

### **How physics is portrayed and framed in the Dutch print media**

#### *Identification feature*

1. Who is coding?  
1 = Coder A, 2 = Coder B
2. In which newspaper was the article published?  
1 = Volkskrant, Volkskrant.nl  
2 = NRC.NEXT, NRC Handelsblad  
3 = Algemeen Dagblad, AD/Algemeen Dagblad.nl, AD/Algemeen Dagblad  
4 = De Telegraaf  
5 = Trouw, Trouw de Verdieping
3. On what day of the week was the article published?  
1 = Monday, 2 = Tuesday, 3 = Wednesday, 4 = Thursday, 5 = Friday,  
6 = Saturday, 7 = Sunday, 0 = Unclear
4. In which month was the article published?  
1 = January, 2 = February, 3 = March, 4 = April, 5 = May, 6 = June, 7 = July,  
8 = August, 9 = September, 10 = October, 11 = November, 12 = December,  
0 = Unclear
5. In what year was the article published?
6. In which section of the newspaper was the article printed? Write down the name of the section that is provided in the Nexis Uni metadata. If there is no section reported in the metadata, put down 0.
7. How many words does the article have. Use the number given by Nexis Uni

#### *Journalistic feature*

8. Who is the author of the news article? Use the name provided by the metadata of Nexis Uni, if unknown fill in 0.
9. What is the title of the article?

## *Research topics*

10. Are more than two fields discussed in the article?

1 = Yes

2 = No

If the answer to question 10 is “1 = Yes”, put down a 0 for question 11 and 12 and proceed with question 13. Otherwise please code the fields present in the articles using question 11 and 12.

11. Physics can be categorized into different fields (Cornell University, 2020). In which field of physics can the main topic of the article be categorized?

1 = Astrophysics, 2 = Condensed matter physics, 3 = General relativity and quantum cosmology, 4 = High energy physics, 5 = Mathematical physics, 6 = Nuclear physics, 7 = Molecular physics, 8 = Biological physics, 9 = Fluid dynamics, 10 = Optics, 11 = Plasma physics, 12 = Quantum physics, 13 = Geophysics, 14 = History and philosophy of physics, 15 = Unknown, and 16 = Other (use the open column in the code sheet to code this field)

12. It is possible that the news article is written about a topic that is on the border of two different fields in physics, or that describes multiple topics in different fields. In which second field of physics can the main topic of the article be categorized? If there is no second field in physics mentioned in the news article fill in 0.

0 = There is no second field discussed in the article, 1 = Astrophysics, 2 = Condensed matter physics, 3 = General relativity and quantum cosmology, 4 = High energy physics, 5 = Mathematical physics, 6 = Nuclear physics, 7 = Molecular physics, 8 = Biological physics, 9 = Fluid dynamics, 10 = Optics, 11 = Plasma physics, 12 = Quantum physics, 13 = Geophysics, 14 = History and philosophy of physics, 15 = Unknown, and 16 = Other (use the open column in the code sheet to code this field)

13. What is the topic of the article?

### *Type of science journalism*

*The theoretical framework of Wormer (2009) was used to analyse if the articles can be interpreted as a classic sense of science communication or a broad sense of science communication. In this framework a categorization of the articles is made by looking at if the event that triggered the news article comes from the scientific world or the non-scientific world.*

*A scientific event originates from the scientific world.*

*For example: scientific discovery, a scientific publication, a scientific lecture, a prize that is awarded to a scientist for his/her professional accomplishments.*

*A non-scientific event originates from daily life, society and politics.*

*For example: physics is used to explain every day phenomena, articles that form an exposé on the personal life of a famous physicist, political decisions about funding of physics.*

14. What type of event triggered the article to be written now?

1 = Scientific

2 = Non-scientific

3 = Unknown or not clear

15. What type of the scientific event triggered the article? If it is not clear which event was the trigger exactly, for example when multiple scientific events are mentioned, put down "6 = Unknown".

0 = There is no scientific event mentioned in the article, the answer to question 14 was 2 or 3.

1 = Research that is starting, or that is still in progress. For example, a new experiment will start, a discovery is made, or a pre-print of an article is written.

2 = A scientific peer reviewed research article is published.

3 = A new research facility is opened or built.

4 = An award or grant was rewarded to a researcher.

5 = A scientific conference, talk, or lecture.

6 = Unknown

7 = Other

If answer to question 15 was "Other = 7", please answer question 16 otherwise put down a 0 for question 16 and proceed with question 17.

16. What scientific event was the trigger of the news article?

17. What type of non-scientific event triggered the article? If it is not clear which event was the trigger exactly, for example if there are more non-scientific events mentioned, put down “5 = Unknown”.

0 = There is no non-scientific event mentioned in the article, the answer to question 14 was 1 or 3.

1 = The event that triggered the news article was connected to the personal life of a famous scientist. For example, the demise of a scientist, celebrating that a famous scientist was born 100 years ago, or an interview that gives a sneak peek into the personal life of a scientist.

2 = The event that triggered the news article is science communication related. For example, a popular scientific novel has been published, a scientific lecture for the general public is given, the article is a reference to another popular scientific news article in the newspaper, or a new exhibition is opened in a science museum.

3 = A political event was the trigger.

4 = The event that triggered the news article and the rest of the news article have nothing to do with physics. Physics is just used as an example or metaphor to illustrate something.

5 = Unknown

6 = Other

If the answer to question 17 is “6 = Other”, please answer question 18, otherwise please put down a 0 at question 18 and proceed to question 19.

18. What non-scientific event was the trigger of the news article?

*Explanation*

19. Are there one or more physics concepts explained in the text?

1 = Yes

2 = No

The explanation doesn't have to be good or long, also short explanations count.

*References*

Cornell University. (2020). Retrieved from arXiv: <https://arxiv.org/>

Wormer. (2009). Science Journalism. *The International Encyclopedia of Communication*. doi:10.1002/9781405186407.wbiecs016