



**PiA<sup>®</sup>** Physik im Advent<sup>®</sup>  
 Noch 24 Experimente bis Weihnachten

# PiA<sup>®</sup> – Physics in Advent 2021



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## What is PiA – Physics in Advent?

Physics in Advent is an Advent calendar of a special kind - a physical Advent calendar! During Advent, young researchers and anyone who enjoys it can solve 24 small simple experiments and physical puzzles and discover the joy of experimenting for themselves.

From 1 to 24 December, an experiment will be presented every day as a video to imitate. On the website the participants can answer the physical question raised in the experiment and watch the resolution of this question as a video. In addition to the fun of experimenting, many great prizes can be won.

Students from grades 5 to 10, i.e. age 11 to 18 years, class associations or even whole schools can take part. Younger or older pupils, parents, students, teachers and anyone interested in physics are cordially invited to take part.

Further information is available at:  
[www.physics-in-advent.org](http://www.physics-in-advent.org)



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## Review: PiA – Physics in Advent 2019

With **43.466 registered participants** from 61 countries worldwide, more than 670.000 visits to the website [www.physics-in-advent.org](http://www.physics-in-advent.org), more than 856.790 clicks on this year's PiA films on YouTube as well as about 191.053 clicks on Facebook and twitter, "PiA - Physics in Advent" 2019 was once again very successful and the response significantly higher than last year. The fraction of female participants was about 49%. With a **total of 1.716.676 registered visits**, a new record was set!

This year we were able to award more than 1350 prizes to the PiA participants, which we received as donations in kind or monetary donations. Among them were also visits to research institutions (DESY, PSI, CERN). As a special prize a hot air balloon ride and a trip to Dallas to two NBA basketball games with Dirk Nowitzki was awarded and his personal trainer (and physicist) Holger Geschwindner supported his organization. The latter did not yet take place due to the Corona pandemics. It was also possible to find numerous technically oriented business enterprises that offered special tours of their companies to the best school classes. This supports the PiA-strategy of demonstrating to young people during their school years the diversity of the profession of physicist through concrete examples. Photos of the prize winners can be found on the website <http://www.physics-in-advent.org> under "Winners 2019".



## Participants statistics 2019

### Participants:

**61.792 participants**

(for comparison 2013: 14.000 / 2014: 20.000 /  
 2015: 23.427 / 2016: 26.174 /  
 2017: 31.242 / 2018: 39.572 /  
 2019: 43.466)

of which students:

56.376

of which teachers:

2.126

of which other adults:

3.290

### schools:

**1406 schools**

(for comparison 2014: 617 / 2015: 737 / 2016: 838,  
 2017: 932 / 2018: 1217 / 2019: 1152)

### Submitted solutions:

**562.656 solutions**

(for comparison 2014: 209.462, 2015: 253.262,  
 2016: 261.287, 2017: 314.556,  
 2018: 411.236, 2019: 432.055)