

9TH IAA PLANETARY DEFENSE CONFERENCE – PDC 2025
5-9 MAY 2025, STELLENBOSCH, CAPE TOWN, SOUTH AFRICA

IAA-PDC-25-10-189

**Asteroid
Impacts**

V **S** **Social Media
Misinformation**

**Introducing an effective media
communication strategy
for planetary defense**



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NASA के अनुसार 2046 के valentine day पर पृथ्वी से एक बहुत बड़ा उल्का पिण्ड टकराएगा.

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END OF THE WORLD!
NASA & ESA says, an astroid would collide with Earth on Valentine's Day of 2046!

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Asteroid the size of 14 flamingos to skim past Earth Wednesday - NASA

By AARON REICH Published: MARCH 1, 2023 16:02



An asteroid is seen near Earth in this artistic illustration. (photo credit: PIXABAY)

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Newly discovered asteroid could hit Earth on Valentine's Day 2046: NASA

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The Tatva

Asteroid likely to collide with Earth on Valentine's Day of 2046: NASA and ESA monitor it, add it on 'threat list'

Size of olympic swimming pool, 2023 DW is 0.12 AU from Earth.



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IN 23 JAHREN
NASA: Valentins-Asteroid soll die Erde auslöschen

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@CURIOSITASTRONOMICHE



NASA: UN ASTEROIDE MINACCIA IL NOSTRO PIANETA. POTREBBE COLPIRE LA TERRA IL 14 FEBBRAIO 2046!

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NASA is tracking a giant asteroid that could hit Earth on Valentine's Day 2046

dotredhippo / Stock via Getty Images

**NASA warns about asteroid
approaching Earth,
may impact on
Valentine's Day 2046**



"Social media loves drama. An asteroid 10 million miles away? Boring. 'KILLER ASTEROID'? Viral gold. Scientists sigh; tabloids celebrate."

Emotion (esp. fear & anger) = More clicks = more money, recognition, credibility, etc.

What can we learn from this?

- Education, debunking and pre-bunking have their place but the issue is not (only) an information deficit.
- It is impossible to completely get rid of clickbait, fake news and misinformation - it's part of the game.
- Understanding this allows the PD community to focus their energy on where it matters - building trust.

Who has attention on social media? Trusted sources

 **neildegassetyson** ✓

Neil deGrasse Tyson

283 posts	2,2 M followers	8 following
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 **thespacegal** ✓

Emily Calandrelli she/her

2 739 posts	1,4 M followers	1 721 following
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MIT Aerospace engineer + Emmy-nominated TV host
📖 #1 NYTimes Best Selling Author
📺 Emily's Science Lab on YouTube
👩 100th Woman in Space
linktr.ee/thespacegal and 2 more

 **billnye** ✓

Bill Nye

511 posts	3,3 M followers	117 following
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Science Guy & CEO of @planetarysociety
linktr.ee/officialbillnye

 **kelliegerardi** ✓

Kellie Gerardi

1 458 posts	1,4 M followers	971 following
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Research Astronaut, Payload Specialist, Mom, Author
2025 USAToday Woman of the Year
Biz: sayhitokellie@gmail.com
Advancing science on Earth & in space 🚀
www.linktree.com/kelliegerardi

 **astronomypicturesdaily**

Astronomy Picture Of The Day

3 842 posts	871K followers	15 following
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Science website
NASA's APOD - featuring a different image each day of our fascinating universe with a description written by a professional astronomer!
apod.nasa.gov

 **everydayastronaut** ✓

Everyday Astronaut

443 posts	276K followers	300 following
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Professional rocket orientation specialist & explainer of flamey stuff. Bringing space down to Earth for everyday people 🚀
astroawards.live

Planetary Defense Community (PDC) communications overview:

- The concept of **'social media'** is **absent** from the PDC's real-time communications strategies, **focus is on traditional media**
- **No concrete plan for social media** communication on planetary defense
- Very **few social media outlets** on planetary defense (NASA Asteroid Watch 1.2m),
- The current discussed approach within the PD community is focused on how to **correct, debunk, prebunk and avoid all fake news/misinformation** with little action taken.
- The online audience meanwhile is **left to news sources and unverified accounts**



Why does planetary defense need a social media communications strategy?

Social media:

- has become the main source of news and information for younger audiences (52% of the world's population is under 30 years old),
- has the fastest pace of all media types,
- social media actors often fail at fact-checking and verification,
- lacks distinct representatives of the PD community as sources of reliable information,
- no practical means for media to verify information with the PD community (gap).

The Great Misinformation Loop:

**Asteroid
detected**

**Media cannot
verify and may
exaggerate**

Day 1

**The PDC
evaluates**

**The public
reacts**

Day 2

**The PDC prepares
a statement**

**The public
forgets**

Day 7

**The PDC issues a
statement**

4 Strategies for PD communications:

1. We need to see social media as an ally, not the enemy.
2. Understand that fake news and misinformation cannot be fought or stopped completely, but can be overcome with a good strategy.
3. Build trusted sources - Trust is the most valuable currency when communicating with the public. The most credible source is a group of different people and organizations, not a single spokesperson.
4. Provide curated information with global distribution via a network of established trusted sources - collaborate with the International Year 2029.

Three steps that we can take tomorrow:

1. Collaborating more with journalists/media/social media;
2. Educating the media & trusted sources about PD, and educate PD community how to convey correct information to media & public
3. Making information and data engaging and accessible, using storytelling techniques and multimedia formats

Misinformation is like an asteroid—we can't stop it, but we can deflect it. Let's get to work!

The best strategy is

THE TRUTH

Thank you!

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