

Real-Time Collaborative Editing

**C. Scott Ananian, Thalia Chan, Roan Kattouw, Ed Sanders
Wikimedia Foundation**

**With thanks to Pau Giner, David Chan, James Forrester,
Dario Taraborelli, Ori Livneh, and Erik Zachte.**



**WIKIMANIA
CAPE TOWN**

**Wikimania 2018
July 20, 2018**

What are we doing here?



WIKIMANIA
CAPE TOWN

What are we doing here?

- Lots of talk among developers about technical mechanisms for real-time collaboration.
- Very little talk about the social aspects or impact on community.
- Not much dialog between developers and editors and readers.
- Let's start to fix that!



Let's discuss (#1)

What we do now:

- How we find collaborators.
- How we find out about new stuff.
- How we coordinate.
- What works well, and...
- What we'd like to fix.



Some designs and ideas



WIKIMANIA
CAPE TOWN



WikiProject

Astronomy

Welcome to the astronomy WikiProject! If you enjoy gazing at the night sky, watching the Moon, stars and planets, or reading about the latest astronomical discoveries, then this is the project for you.

+ New activity

Activity

New articles

Tools

Today



Io (Moon)

Galilean moon of Jupiter

5 editors woking on it

Join the session

12 March



Curiosity → Curiosity (Rover)

Car-sized robotic rover exploring Gale Crater on Mars.

Redirect

Discussion

15 March



Pillars of Creation

astrophotograph

Proposed deletion

Discussion



120 Members

N.Agas

2743 Wikipedia

2 min. ago



Wayne Milk

Callisto (moon)

3 hours ago



Hal Nine K

Callisto (moon)

5 days ago



Mentoring

Carl

Io (moon)

2 min. ago



Anna Wong

Io (moon)

4 days. ago



Jules-Tr

Curiosity (rover)

15 days ago



N.Agas starts a new article and asks other members of the Astronomy WikiProject to join editing together.

N.Agas starts a new article and asks other members of the Astronomy WikiProject to join editing together.

WikiProject

Astronomy

Welcome to the astronomy WikiProject! If you enjoy gazing at the night sky, watching the Moon, stars and planets, or reading about the latest astronomical discoveries, then this is the project for you.

+ New activity

Topic 274301 Wikipedia Tools

Work on Let's expand this article

Invite Astronomy YuriGgr

[Start editing session](#) Join the session

12 March



Curiosity → [Curiosity \(Rover\)](#)

Car-sized robotic rover exploring Gale Crater on Mars.

[Redirect](#)

[Discussion](#)

15 March



[Pillars of Creation](#)

astrophotograph

[Proposed deletion](#)

[Discussion](#)

120 Members

N.Agas

[2743 Wikipedia](#)

2 min. ago



Wayne Milk

[Callisto \(moon\)](#)

3 hours ago



Hal Nine K

[Callisto \(moon\)](#)

5 days ago



Mentoring

Carl

[lo \(moon\)](#)

2 min. ago



Anna Wong

[lo \(moon\)](#)

4 days ago



Jules-Tr

[Curiosity \(rover\)](#)

15 days ago



Jane joins the session to edit “274301 Wikipedia” (asteroid) in real-time mode

WikiProject

Astronomy

Welcome to the astronomy WikiProject! If you enjoy gazing at the night sky, watching the Moon, stars and planets, or reading about the latest astronomical discoveries, then this is the project for you.

+ New activity

Activity

New articles

Tools

Today



274301 Wikipedia

Main belt asteroid · Let's expand this article

New edit session

Join the session



Io (Moon)

Galilean moon of Jupiter

5 editors woking on it

Join the session

12 March



Curiosity → Curiosity (Rover)

Car-sized robotic rover exploring Gale Crater on Mars.

Redirect

Discussion

15 March



Pillars of Creation

astrophotograph

120 Members

N.Agas

2743 Wikipedia

2 min. ago



Wayne Milk

Callisto (moon)

3 hours ago



Hal Nine K

Callisto (moon)

5 days ago



Mentoring

Carl

Io (moon)

2 min. ago



Anna Wong

Io (moon)

4 days. ago



Jules-Tr

Curiosity (rover)

15 days ago



Jane joins the session to edit “274301 Wikipedia” (asteroid) in real-time mode

The screenshot shows a web browser interface for editing the Wikipedia article "274301 Wikipedia". At the top, a green banner indicates "One new edit by WayneMilk" and provides links for "View recent edits" and "Pause live updates". The article title "274301 Wikipedia" is prominently displayed. Below the title, the main text reads: "274301 Wikipedia (provisional designations: 2008 QH₂₄, 2007 FK₃₄, 1997 RO₄) is a main belt asteroid. It was discovered by the Andrushivka Astronomical Observatory in August 2008. The asteroid was named after the online encyclopedia Wikipedia in January 2013." A section header "D" is visible below the main text. The top of the browser shows editing tools like bold, italic, underline, and a list of icons. On the right side, there are icons for a user profile, a chat bubble, and a clock.

Other users add content to the article at the same time. Jane wants to find out who they are ..

The screenshot shows the top portion of a Wikipedia article's edit page. At the top, there is a navigation bar with a close button (X), the text 'Editing 274301 Wikipedia', and various editing tools (Bold, Italic, Underline, Bulleted list, Numbered list, Link, Image). Below this is a green status bar indicating 'One new edit by WayneMilk' and buttons for 'View recent edits' and 'Pause live updates'. The main content area has a title '274301 Wikipedia' followed by a paragraph: '274301 Wikipedia (provisional designations: 2008 QH₂₄, 2007 FK₃₄, 1997 RO₄) is a main belt asteroid. It was discovered by the Andrushivka Astronomical Observatory in August 2008. The asteroid was named after the online encyclopedia Wikipedia in January 2013.' Below the paragraph is a section header 'Discovery' with a sub-paragraph: 'The asteroid was discovered by astronomers from the Andrushivka Astronomical Observatory (A50) in Ukraine. It was also observed on the next night and it received provisional designation 2008 QH24'. Two grey callout boxes are present: one pointing to '2008 QH24' with the name 'Carl' and another pointing to 'received' with the name 'Jules-Tr'. On the right side, there are icons for user profile, chat, and a clock.

Editing 274301 Wikipedia

One new edit by WayneMilk

View recent edits

Pause live updates

274301 Wikipedia

274301 Wikipedia (provisional designations: **2008 QH₂₄**, **2007 FK₃₄**, **1997 RO₄**) is a **main belt asteroid**. It was discovered by the **Andrushivka Astronomical Observatory** in August 2008. The asteroid was named after the online encyclopedia **Wikipedia** in January 2013.

Discovery

The asteroid was discovered by astronomers from the Andrushivka Astronomical Observatory (A50) in Ukraine.

It was also observed on the next night and it received provisional designation 2008 QH24

Carl

Jules-Tr

Jane can view who is participating in the article...

X Editing 274301 Wikipedia B I U := 1/2= [Link] [Image]






274301 Wikipedia

274301 Wikipedia (provisional designations: **2008 QH₂₄**, **2007 FK₃₄**, **1997 RO₄**) is a [main belt asteroid](#). It was discovered by the [Andrushivka Astronomical Observatory](#) in August 2008. The asteroid was named after the online encyclopedia [Wikipedia](#) in January 2013.

Discovery

The asteroid was discovered by astronomers from the Andrushivka Astronomical Observatory (A50) in Ukraine. It was also observed on the next night and it received provisional designation 2008 QH24.

Last edited 2 days ago by N.Agas

 12 Editors 
N.Agas Astronomy 21 edits 
Wayne Milk Spaceflight Blades ... 15 edits 
Hal Nine K Spaceflight 15 edits 

▼

+ Invite collaborators

Quick conversation

...and what are they working on.

274301 Wikipedia

274301 Wikipedia (provisional designations: **2008 QH₂₄**, **2007 FK₃₄**, **1997 RO₄**) is a [main belt asteroid](#). It was discovered by the [Andrushivka Astronomical Observatory](#) in August 2008. The asteroid was named after the online encyclopedia [Wikipedia](#) in January 2013.

Discovery

The asteroid was discovered by astronomers from the Andrushivka Astronomical Observatory (A50) in Ukraine. It was also observed on the next night and it received provisional designation 2008 QH24.



Discussion

A reference is missing

The NASA references don't work for me, and I cannot find a reference for...

 JohnS

 8  6

Redirects

"Wikipedia Asteroid" and "Asteroid Wikipedia" should redirect to this...

 CosminAunt

 8  6



+ New topic

Quick conversation

With the live history view, Jane can see changes as they happen, and navigate a timeline of changes.

Curiosity (rover)

Curiosity is a car-sized [robotic rover](#) exploring [Gale Crater](#) on [Mars](#) as part of [NASA's Mars Science Laboratory mission \(MSL\)](#).^[9]

Curiosity was launched from [Cape Canaveral](#) on November 26, 2011, at 10:02 EST aboard the MSL spacecraft and successfully landed on [Aeolis Palus](#) in Gale Crater on Mars on August 6, 2012, 05:17 UTC.^{[1][11]} The [Bradbury Landing site](#)^[8] was less than 2.4 km (1.5 mi) from the center of the rover's touchdown target after a 563,000,000 km (350,000,000 mi) journey.^[12]

On June 24, 2014, Curiosity completed a [Martian year](#)—687 Earth days—after finding that Mars once had [environmental conditions favorable for microbial life](#).^[16]

Goals and objectives

As established by the [Mars Exploration Program](#), the main scientific goals of the MSL mission are to [find martians](#) [help determine whether Mars could ever have supported life](#), as well as determining the [role of water](#), and to study the [climate](#) ^[13]^[14] and [geology of Mars](#).^{[13][14]} The mission will also help prepare for [human](#) ^[14] exploration.^[14]

Last edited 2 days ago by N.Agas

History

1m	Current new news	6 Astronomy	-5 +20
2h	Details on the name	Cronopio	+22
3h	Discovery info	Wayne Milk	-8 +20
4h	Correct style	4 Astronomy	-9 +3
6h	More details	4 Astronomy	-2 +5

Current new news

6 editors [view conversation](#)

N.Agas

Wayne Milk

Hal Nine K

[View this version](#) [Revert](#)

Quick conversation 1

Jane can focus on a given paragraph to view authorship...

Curiosity (rover)

Curiosity is a car-sized [robotic rover](#) exploring [Gale Crater](#) on [Mars](#) as part of [NASA's Mars Science Laboratory mission](#) (MSL).^[9]

Curiosity was launched from [Cape Canaveral](#) on November 26, 2011, at 10:02 EST aboard the MSL spacecraft and successfully landed on [Aeolis Palus](#) in Gale Crater on Mars on August 6, 2012, 05:17 UTC.^{[11][1]} The [Bradbury Landing site](#)^[8] was less than 2.4 km (1.5 mi) from the center of the rover's touchdown target after a 563,000,000 km (350,000,000 mi) journey.^[12]

On June 24, 2014, Curiosity completed a [Martian year](#)—687 Earth days—after finding that Mars once had [environmental conditions favorable for microbial life](#).^[6]

Goals and objectives

As established by the [Mars Exploration Program](#), the main scientific goals of the MSL mission are to [find martians help determine whether Mars could ever have supported life](#), as well as determining the [role of water](#), and to study the [climate](#) ^{[13][14]} and [geology of Mars](#).^{[13][14]} The mission will also help prepare for [human](#) ^[14] exploration.^[14]

Last edited 2 days ago by N.Agas

History

1m	Current new news	6 Astronomy	-5 +20
2h	Details on the name	Cronopio	+22
3h	Discovery info	Wayne Milk	-8 +20
4h	Correct style	4 Astronomy	-9 +3
6h	More details	4 Astronomy	-2 +5

Current new news

6 editors [view conversation](#)

N.Agas	
Wayne Milk	
Hal Nine K	
View this version	Revert

Quick conversation

1

..or on given authors to view how much they contributed.

Curiosity (rover)

Curiosity is a car-sized [robotic rover](#) exploring [Gale Crater](#) on [Mars](#) as part of [NASA's Mars Science Laboratory mission](#) (MSL).^[9]

Curiosity was launched from [Cape Canaveral](#) on November 26, 2011, at 10:02 EST aboard the MSL spacecraft and successfully landed on [Aeolis Palus](#) in Gale Crater on Mars on August 6, 2012, 05:17 UTC.^{[11][1]} The [Bradbury Landing site](#)^[8] was less than 2.4 km (1.5 mi) from the center of the rover's touchdown target after a 563,000,000 km (350,000,000 mi) journey.^[12]

On June 24, 2014, Curiosity completed a [Martian year](#)—**687 Earth days**—after finding that Mars once had [environmental conditions favorable for microbial life](#).^[6]

Goals and objectives

As established by the [Mars Exploration Program](#), the main scientific goals of the MSL mission are to [find martians](#) help determine **whether Mars could ever have supported life**, as well as determining the [role of water](#), and to study the [climate](#) ⁺⁹ and [geology of Mars](#).^{[13][14]} The mission will also help prepare for human exploration.^[14]

Last edited 2 days ago by N.Agas

History

1m	Current new news	6 Astronomy	-5 +20
2h	Details on the name	Cronopio	+22
3h	Discovery info	Wayne Milk	-8 +20
4h	Correct style	4 Astronomy	-9 +3
6h	More details	4 Astronomy	-2 +5

Current new news

6 editors [view conversation](#)

N.Agas	
Wayne Milk	
Hal Nine K	

[View this version](#)

[Revert](#)

Quick conversation

1

Let's discuss: Challenges

- One version - multiple authors
- Real-time vandalism
- Co-existence of real-time and non-real-time
 - Focused writing
 - Unsupported browsers
 - Social reasons
- Chat misuse
- Can our tools keep up with new attacks?



Let's discuss: Applications

- Current events
- Conflict resolution
- Mentoring
- Targeted collaborations
- Teahouse / new user walkthroughs
- Others?



Let's discuss: Questions

- How do we find other editors?
- Do we need “user groups”?
- How to record/display who wrote what in a collaborative session?
- How do collaborative and solo edits interact?
- When is a collaborative edit “done”?



Let's discuss: Social impact

- Will this encourage new editors? Readers?
- Will this encourage abuse?
- Do we become the next Facebook?
 - Should we?
- What happens when we make visible the community behind the wiki?
 - Should we?
 - Does that make us less “academic”?
 - Does that make us more biased?



Let's discuss: Diversity

- How can we organize collaborative editing sessions in a way that promotes contributor diversity?
- What role should collaborative translation vs collaborative authoring play in bridging knowledge gaps in lesser-resourced languages?



Strawman

- **Radically open. No ownership of session.**
Also: anyone in session can kick anyone, but it's recorded/reported.
"Report abuse" button in session, saves entire transaction history and all participants for review.
Can use 'global undo' to revert vandalism w/in session
- **No real time chat. use Out-Of-Band mechanism.**
- **All you need is the URL to join a session. (Shared Out-Of-Band)**
- **Public listing of all active sessions**
- **Anyone can save. Save button starts a timer and anyone can object/edit to abort, but otherwise person who hits save is credited for the edit (others appear in comment) and is responsible for reviewing diff and preventing bad things.**





SHARE

Sign in

Rich text editor toolbar with icons for undo, redo, bold, italic, underline, text color, background color, link, unlink, bulleted list, numbered list, decrease indent, increase indent, and link removal.


Suggesting

Modern western square dance


From Wikipedia, the free encyclopedia

Modern western square dance (also called **western square dance**, **contemporary western square dance**, **modern American square dance** or **modern square dance**) is one of two American types of [square dancing](#), along with [traditional square dance](#). **Modern western square dance is danced all over the world, by folks young and old.** ~~As a dance form, modern western square dance grew out of traditional square dance in the [American West](#).~~ The term *western square dance*, for some, is synonymous with "cowboy dance" or traditional western square dance. Therefore this article uses the term "modern western square dance" to describe the contemporary non-historical dance which grew out of the traditional dance.

Modern western square dance, like traditional square dance, is directed by a [caller](#). In modern western square dance the caller strings together a sequence of individual [square dance calls](#) to make a figure or sequence. The calls may be spoken (in a "patter dance") or sung (in a "singing call"). These calls are the building blocks of the [choreography](#) that is danced by the individuals – square dancers – in the squares. There are eight people (four pairs of males and females, traditionally) in each square; at a dance there may be many squares. Generally

 C. Scott Ananian
1:00 AM Today

Replace: "As a dance form, modern western square dance grew out of traditional square dance in the American We..." with "Modern western square dance is danced all over the world, by folks young and old."

 Anonymous
1:06 AM Today

Add: "The calls may be spoken (in a "patter dance") or sung (in a "singing call")."

Reply...

Demonstration!



WIKIMANIA
CAPE TOWN

Discuss!



WIKIMANIA
CAPE TOWN

Thank you!



WIKIMANIA
CAPE TOWN

Enkosi!



WIKIMANIA
CAPE TOWN