## 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.





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## 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:

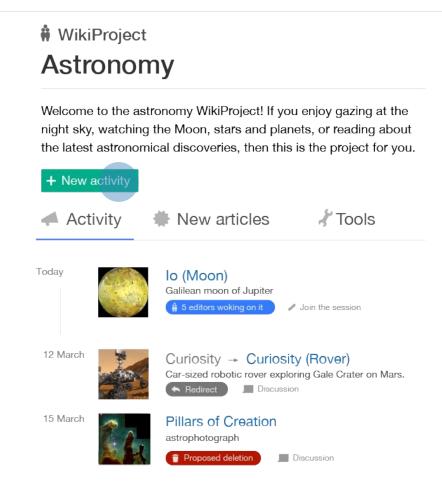
- How we find collaborators.
- How we find out about new stuff.
- How we coordinate.
- What works well, and...
- What we'd like to fix.

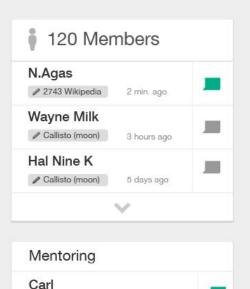


# Some designs and ideas



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





2 min. ago

4 days, ago

15 days ago

/ lo (moon)

/ lo (moon)

Jules-Tr Curiosity (rover)

Anna Wong

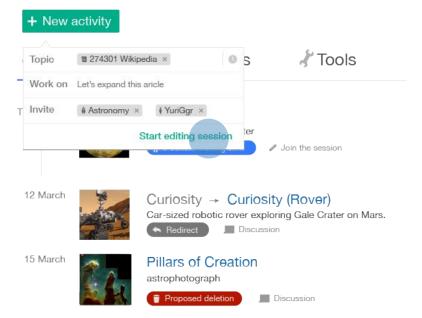
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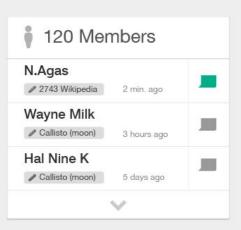
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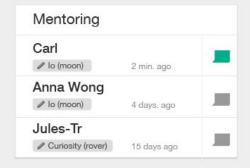


#### Astronomy

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.



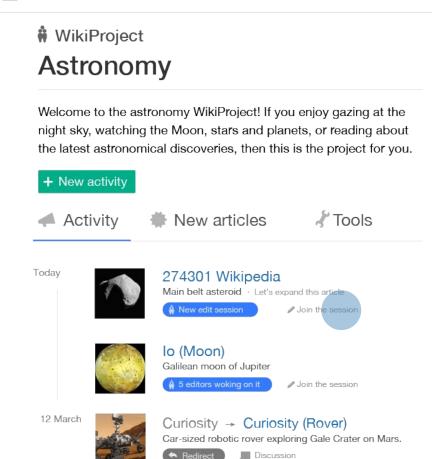




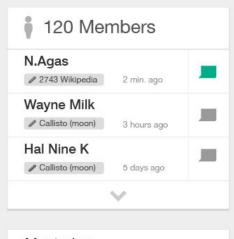
15 March

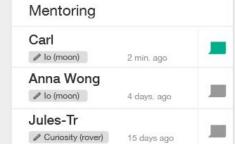
Jane joins the session to edit "274301 Wikipedia" (asteroid) in

real-time mode



Pillars of Creation astrophotograph





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



 $I \quad \underline{\cup} \quad := \quad \frac{1}{2}$ 







View recent edits

Pause live updates

#### 274301 Wikipedia

274301 Wikipedia (provisional designations: 2008 QH<sub>24</sub>, 2007 FK<sub>34</sub>, 1997 RO<sub>4</sub>) 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.











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



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Pause live updates

### 274301 Wikipedia

One new edit by WayneMilk

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#### 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









the article...



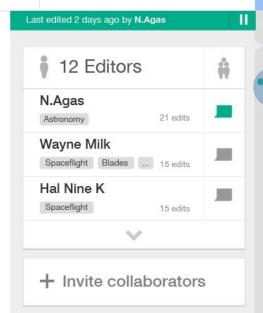












Quick conversation

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 $\rightarrow$ 

Quick conversation

...and what are they working on.

#### Curiosity (rover)

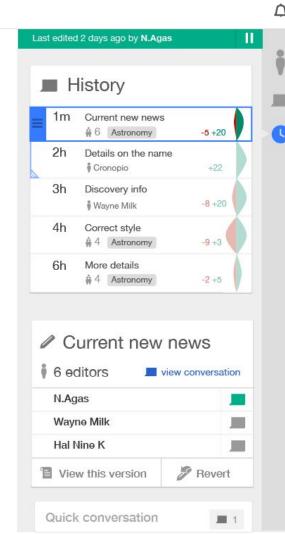
Curiosity is a car-sized robotic rover exploring Gale Crater on Mars as part of NASA's Mars Science Laboratory mission (MSL).[3]

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<sup>[8]</sup> 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 of and geology of Mars.[13][14] The mission will also help prepare for human open exploration. [14]



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

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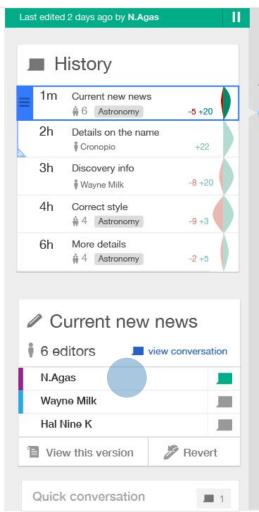
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..or on given authors to view how much they contributed.

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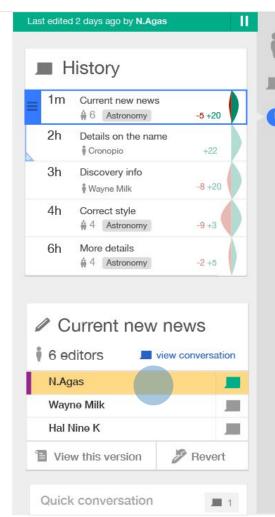
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### Let's discuss: Challenges

- 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?
  - Open 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.











### 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 <u>caller</u>. In modern western square dance the caller strings together a sequence of individual <u>square dance calls</u> 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 <u>choreography</u> 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 Anan 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!



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