Introduction to WIKIDATA

Léa Lacroix - @Auregann Open Data Day 2017

What is Wikidata?

- A knowledge base
- Part of the Wikimedia projects
- Structured data
- Linked to other databases
- Multilingual
- Collaborative
- Released under public domain (CC0)
- Based on facts and references
- Made for humans and machines

Why Wikidata?

- Started in 2012
- "Giving more people more access to more knowledge"
- Provide structured data for Wikipedia
- ...and the other Wikimedia projects
- ...and the rest of the world

South Pole Telescope

From Wikipedia, the free encyclopedia

The South Pole Telescope (SPT) is a 10 meter (394 in) diameter telescope located at the Amundsen–Scott South Pole Station, Antarctica. The telescope is designed for observations in the microwave, millimeter-wave, and submillimeter-wave regions of the electromagnetic spectrum, with the particular design goal of measuring the faint, diffuse emission from the cosmic microwave background (CMB). The first major survey with the SPT–designed to find distant, massive, clusters of galaxies through their interaction with the CMB, with the goal of constraining the dark energy equation of state—was completed in Cotober 2011. In early 2012, a new camera was installed on the SPT with even greater sensitivity and the capability to measure the polarization of incoming light. This camera is designed to measure the so-called "B-mode" or "curl" component of the polarized CMB, leading to constraints on the mass of the neutrino and the energy scale of inflation. [2]

The SPT collaboration is made up of over a dozen (mostly North American) institutions, including the University of Chicago, the University of California-Berkeley, Case Western Reserve University,
Harvard/Smithsonian Astrophysical Observatory, the University of Colorado-Boulder, McGill University, The University of Illinois at Urbana-Champaign, University of California at Davis, Ludwig Maximilian
University of Munich, Argonne National Laboratory, and the National Institute for Standards and Technology. It is funded by the National Science Foundation.

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Microwave/millimeter-wave observations at the South Pole [edit]

The South Pole is the premier observing site in the world for millimeter-wavelength observations. The Pole's high altitude (2.8 km/1.7 mi above sea level) means the atmosphere is thin, and the extreme cold keeps the amount of water vapor in the air low.^[3] This is particularly important for observing at millimeter wavelengths, where incoming signals can be absorbed by water vapor, and where water vapor emits radiation that can be confused with astronomical signals. Because the sun does not rise and set daily, the atmosphere at the pole is particularly stable. Further, there is no interference from the sun in the millimeter range during the months of polar night.

The telescope [edit]

The telescope is a 10-meter (394 in) diameter off-axis Gregorian telescope in an altazimuth mount (at the poles, an altazimuth mount is effectively identical to an equatorial mount). It

Coordinates: @ 90°S 0°E

South Pole Telescope



The South Pole Telescope in November 20

Location(s) Amundsen–Scott South

Pole Station, Antarctic
Treaty area[*]

Built November 2006–February 2007

First light 16 February 2007

Telescope style Gregorian telescope, radio

telescope

Diameter 10.0 metre

Collecting area 78.5 square metre

Website pole.uchicago.edud

Related media on Wikimedia Commons

edit on Wikidata]

Let's have a look!

- https://www.wikidata.org
- Item Berlin (Q64)
- IDs, labels and descriptions
- Statements = properties + values + qualifiers + references
- Old/complex data (country)
- External IDs (GND)
- Links to other projects

What makes Wikidata special?

- Collaborative and free license
- We are aware that the world is complex
- Multiple tools to improve and query
- Awesome and diverse community

25 Million items

3100 properties

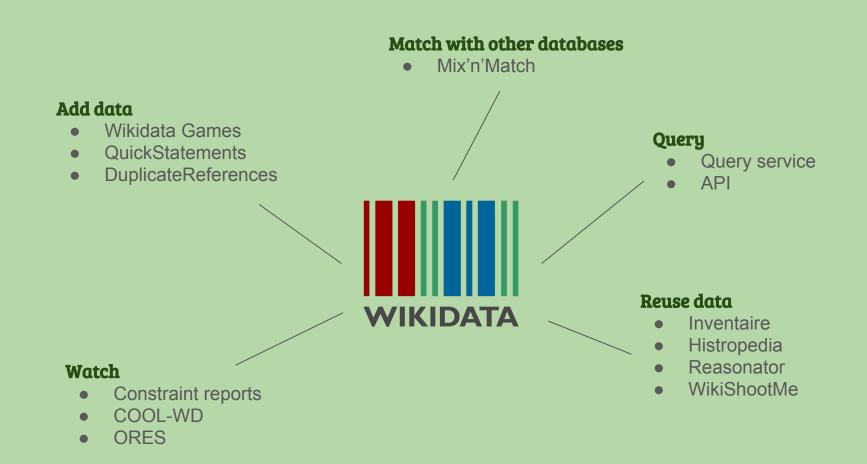
136 Million statements

17 500 editors

3rd most active Wikimedia project

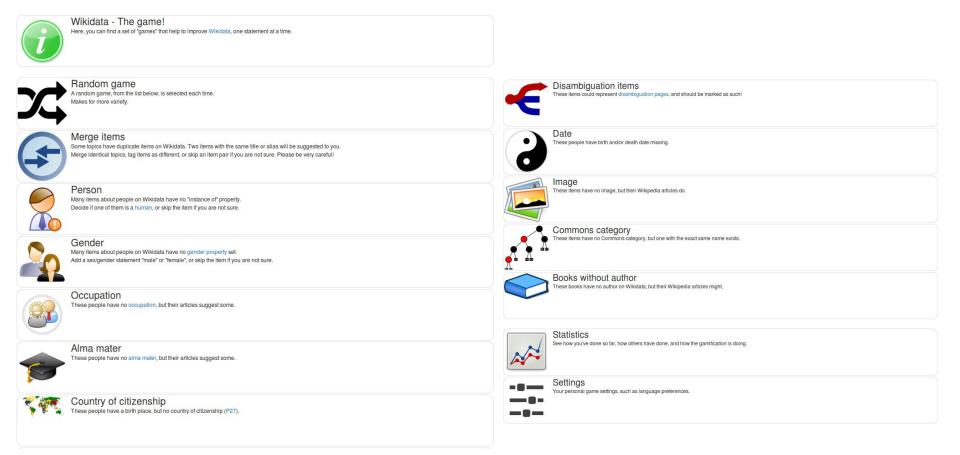
(after English Wikipedia and Commons)

A galaxy of tools around Wikidata



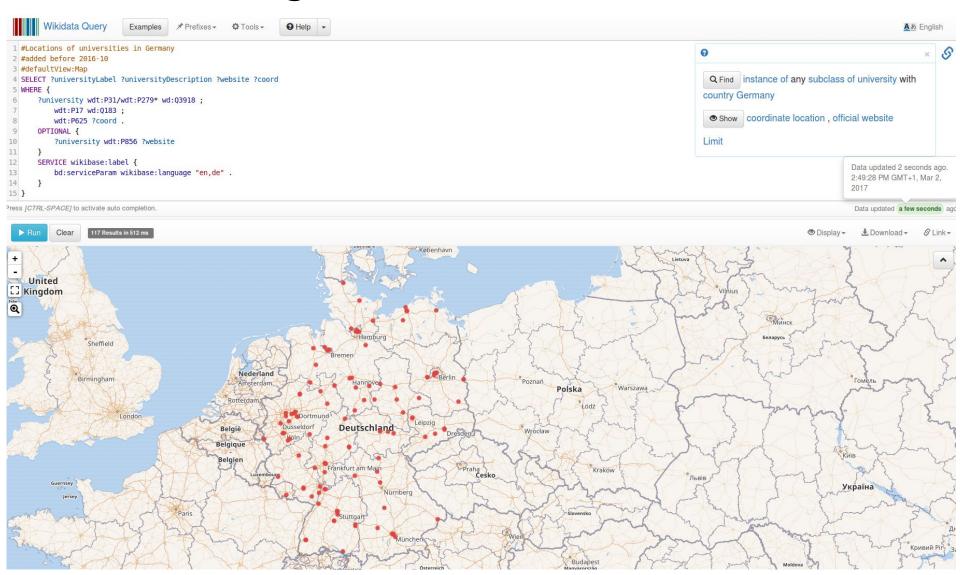
...and way more: https://www.wikidata.org/wiki/Wikidata:Tools

Wikidata Games



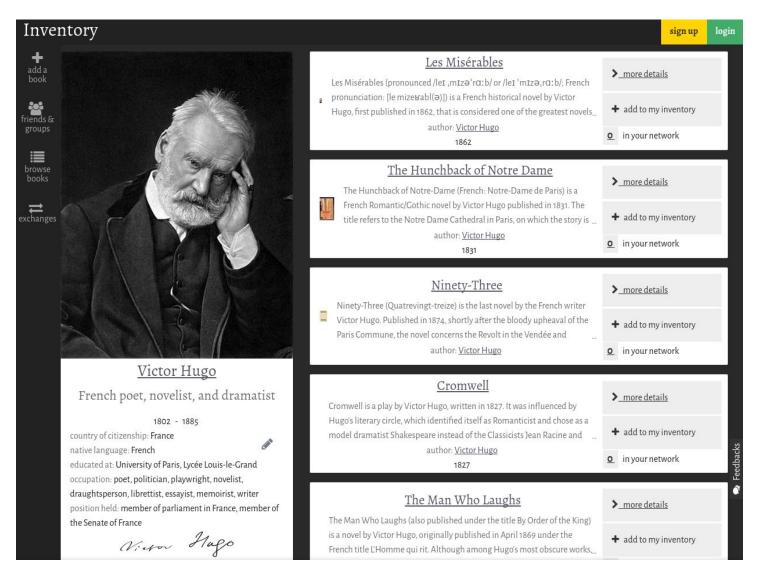
https://tools.wmflabs.org/wikidata-game/

Wikidata Query Service



https://query.wikidata.org/

Inventaire



What applications?

- Wikidata data is made to be reused!
- Link Wikidata to databases/open data
- Use Wikidata for your application
- Use Wikidata in Civic Tech <3



How to play with Wikidata?

- Try one of the Wikidata games (need an account)
- Test the query service
- More informations: https://www.wikidata.org/wiki/Help:Contents
- Ask questions on IRC: #wikidata or Twitter @Wikidata

Questions?

Thank you and have fun!