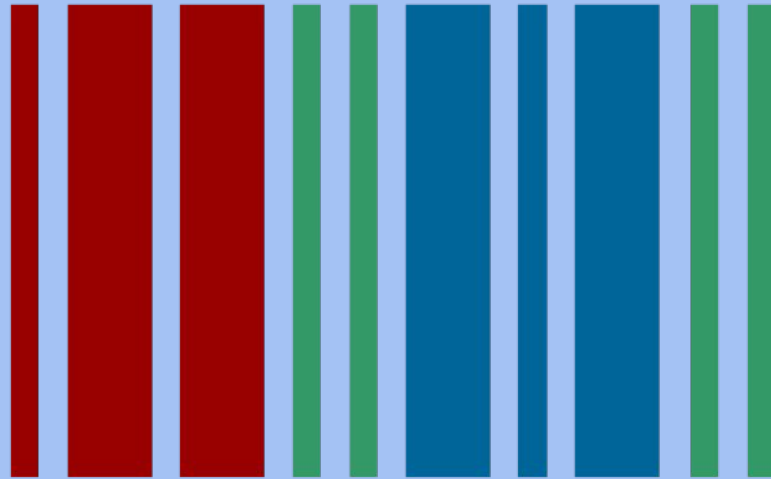


Introduction to



WIKIDATA

Léa Lacroix - @Auregann

Celtic Knot Conference, Aberystwyth, July 2018

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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

Coordinates: 90°S 0°E﻿ / ﻿90°S 0°E﻿ / -90; 0﻿ / -90; 0

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)**.^[1] 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 October 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**.

Contents

- Microwave/millimeter-wave observations at the South Pole
- The telescope
- The SPT-SZ camera
- The SPTpol camera
- Science goals
- Funding
- Current status
- See also
- References
- External links

Microwave/millimeter-wave observations at the South Pole

The South Pole is the premier observing site in the world for millimeter-wavelength observations. The Pole's high altitude (2.8 km1.7 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

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

South Pole Telescope



The South Pole Telescope in November 2009

Location(s)	Amundsen–Scott South Pole Station, Antarctic Treaty area [*]
Coordinates	90°S 0°E﻿ / ﻿90°S 0°E﻿ / -90; 0﻿ / -90; 0
Altitude	2.8 kilometre
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.edu ​
 Related media on Wikimedia Commons	
 [edit on Wikidata]	

Let's have a look!

- <https://www.wikidata.org>
- Item Aberystwyth (Q213154)
- IDs, labels and descriptions
- Statements = properties + values + qualifiers + references
- Old/complex data (country)
- External IDs (BNF)
- 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

49 Million
items

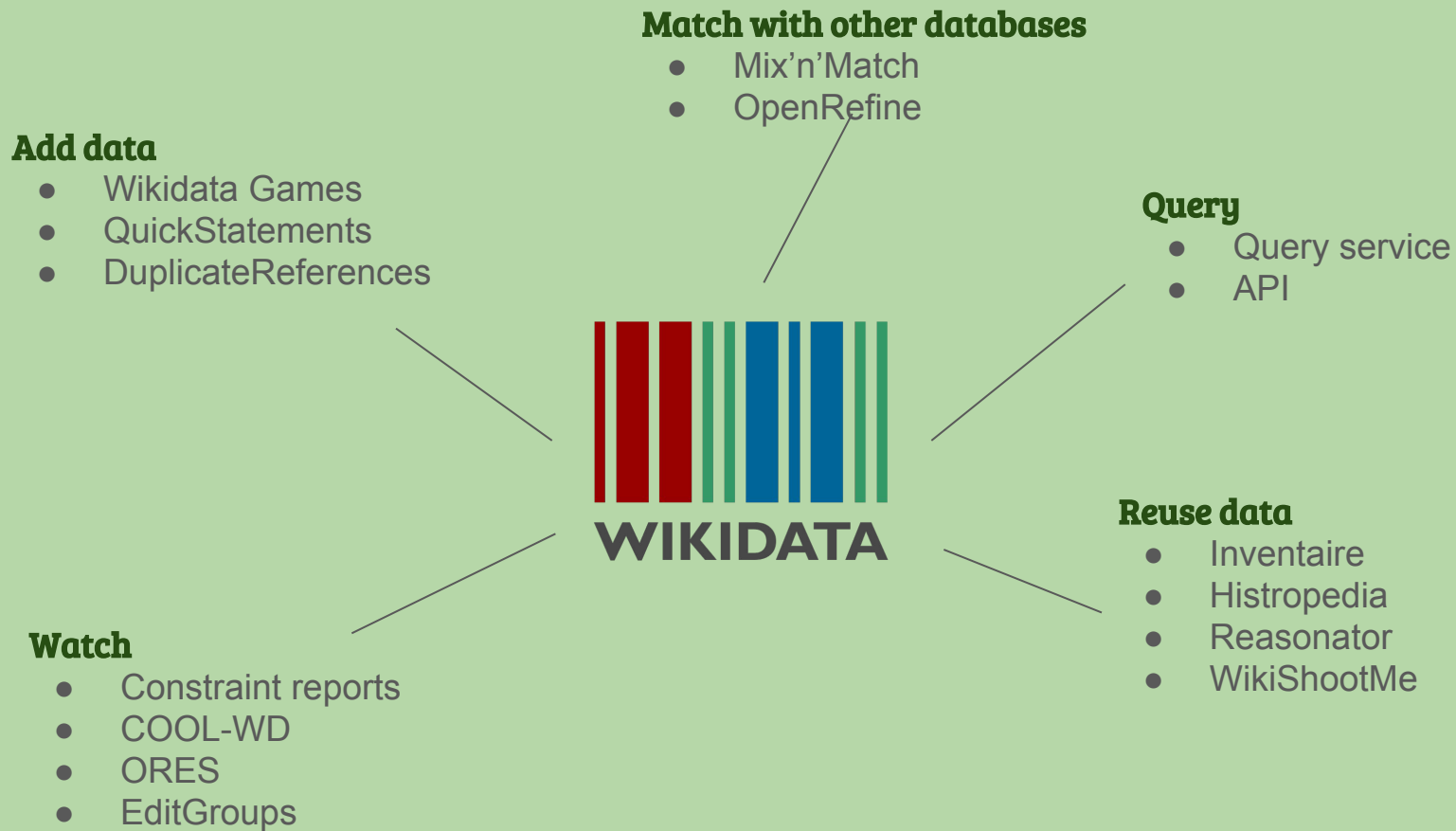
4800
properties

475 Million
statements

18 500
editors

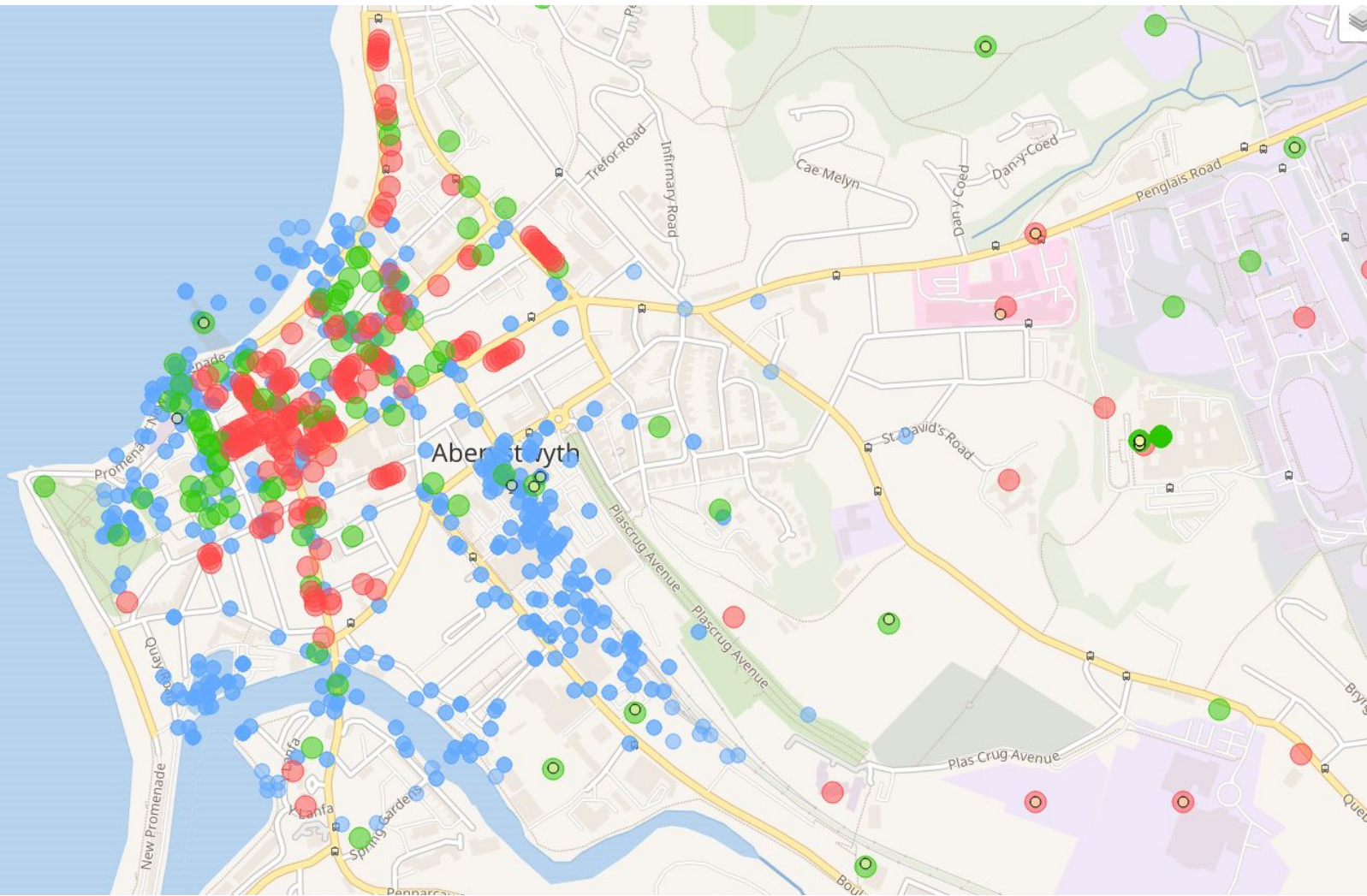
3rd most active Wikimedia project
(after Wikipedias and Commons)

A galaxy of tools around Wikidata



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

WikiShootMe







<https://tools.wmflabs.org/wikishootme>





George, le 2e texte





Je cherche une autrice contemporaine de...





Rechercher





Autrices nées avant 1680, et décédées après 1636 ou nées après 1606 selon WikiData (la recherche peut prendre plusieurs secondes...) :





Madeleine de Scudéry    





Ninon de Lenclos    





Madame de La Fayette    





Anne Marie Louise d'Orléans    





Madame Guyon    





Louise de La Vallière    





Marie-Catherine d'Aulnoy    





Anne Marie de Schurman    





Anne Dacier    





Anne-Thérèse de Marguenat de Courcelles    





Marie de Gournay    





Hortense Mancini    





Madeleine de Souvré, marquise de Sablé    





Antoinette Des Houlières    





Jacqueline Pascal    

Élisabeth-Sophie Chéron    

Angélique Arnauld    

Marie-Catherine de Villedieu    

Marie-Anne Barbier    

Marie-Jeanne L'Héritier de Villandon    

Wikidata Guessr

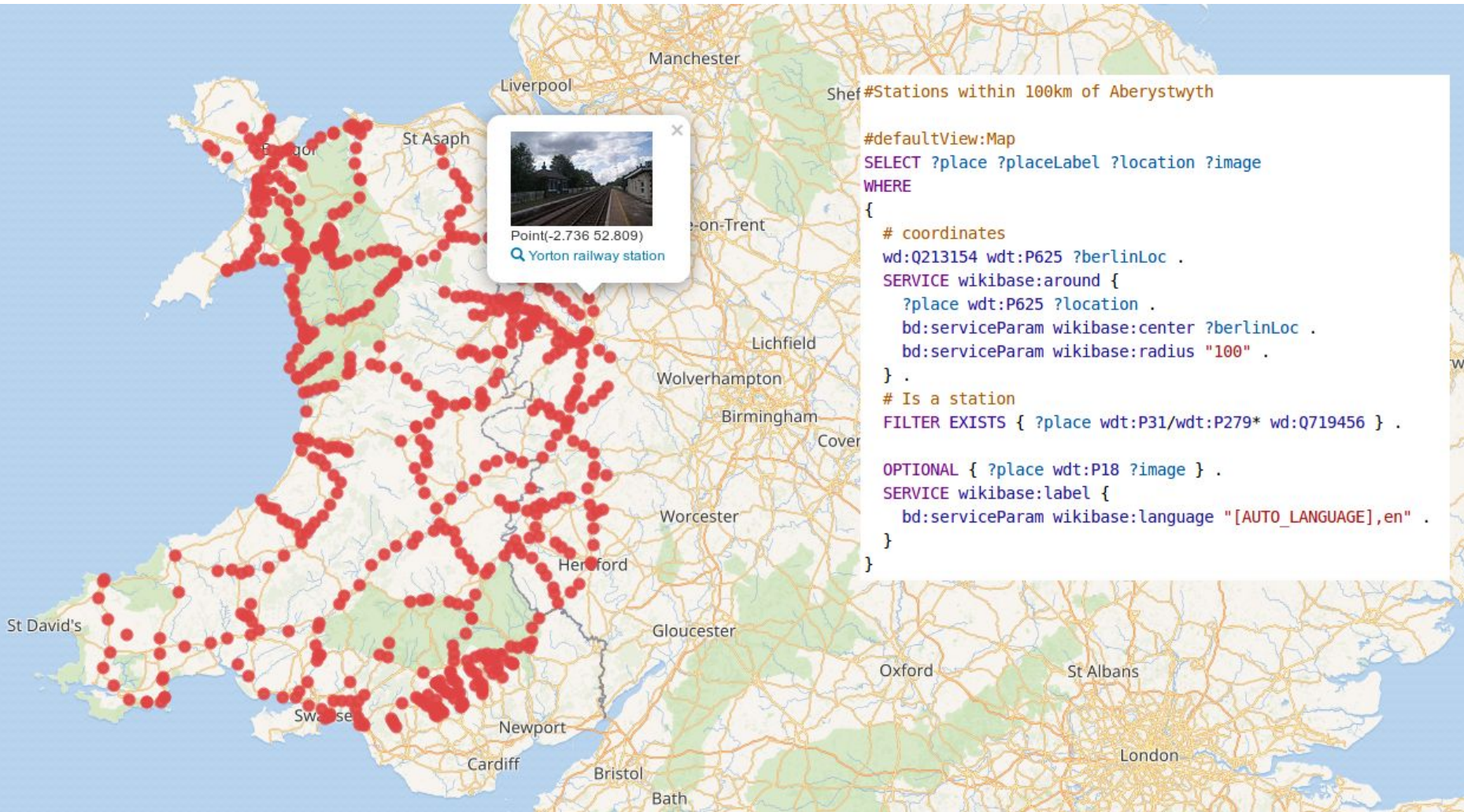


Current Round: 1/5
Last Round Score: 0
Total Score: 0
[View project on GitHub](#)
Start new game...

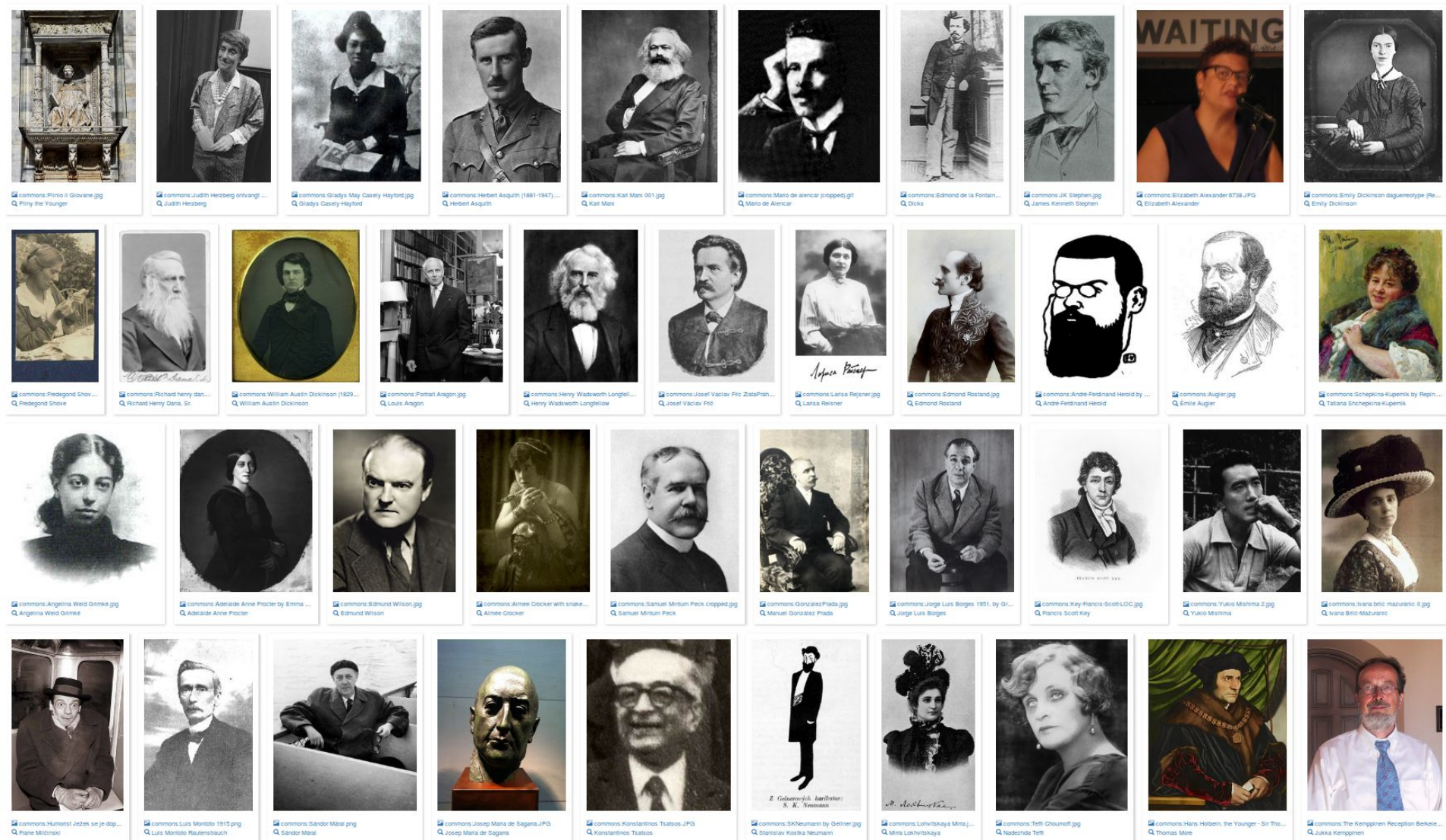
Make Your Guess

<http://guessr.morr.cc/>

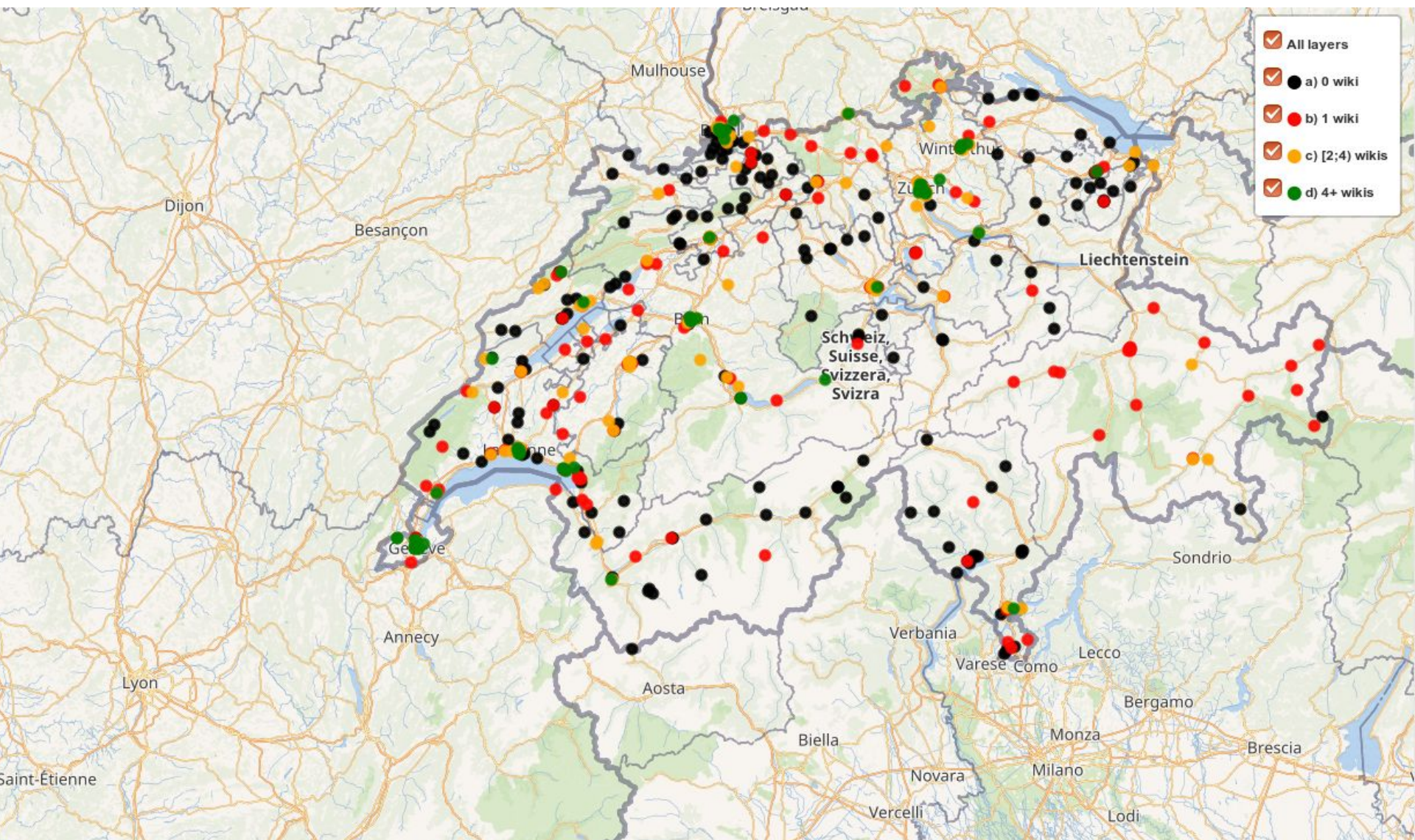
Wikidata Query Service



Poets whose fathers were lawyers



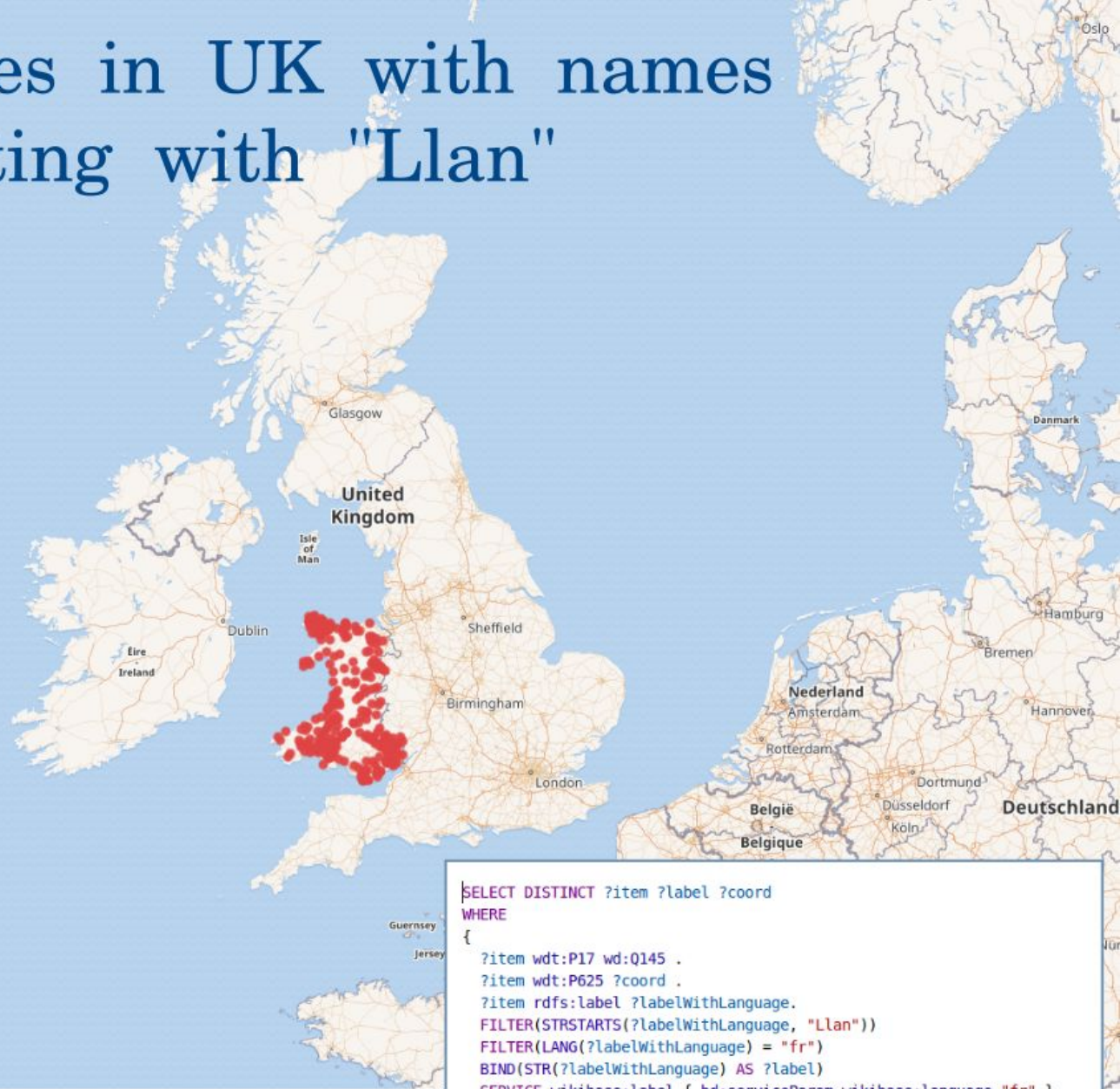
Museums in Switzerland colored by number of Wikipedia articles



Viennese composers and their compositions by tonality

- ▷  Alban Berg
- ▷  Alexander von Zemlinsky
- ▷  Anton Bruckner
- ◀  Antonio Vivaldi
 - ▷  E minor
 - ▷  G minor
- ▷  Arnold Schoenberg
- ▷  Franz Schubert
- ◀  Gustav Mahler
 - ▷  A minor
 - ▷  C minor
 - ▷  C-sharp minor
 - ▷  D major
 - ▷  D minor
 - ▷  E-flat major
 - ▷  F-sharp major
 - ▷  G major
- ▷  Johann Strauss I
- ▷  Johannes Brahms
- ▷  Joseph Haydn
- ▷  Karl Goldmark
- ▷  Ludwig van Beethoven
- ▷  Wolfgang Amadeus Mozart

Places in UK with names starting with "Llan"



```
SELECT DISTINCT ?item ?label ?coord
WHERE
{
  ?item wdt:P17 wd:Q145 .
  ?item wdt:P625 ?coord .
  ?item rdfs:label ?labelWithLanguage.
  FILTER(STRSTARTS(?labelWithLanguage, "Llan"))
  FILTER(LANG(?labelWithLanguage) = "fr")
  BIND(STR(?labelWithLanguage) AS ?label)
  SERVICE wikibase:label { bd:serviceParam wikibase:language "fr" }
}
```

Wikidata & the minority languages

How Wikidata can help minority languages on the Wikimedia projects?

Where can the content of Wikidata be reused?

How can you help sharing your knowledge on Wikidata?



Language gaps in Wikidata

by Simon Cobb

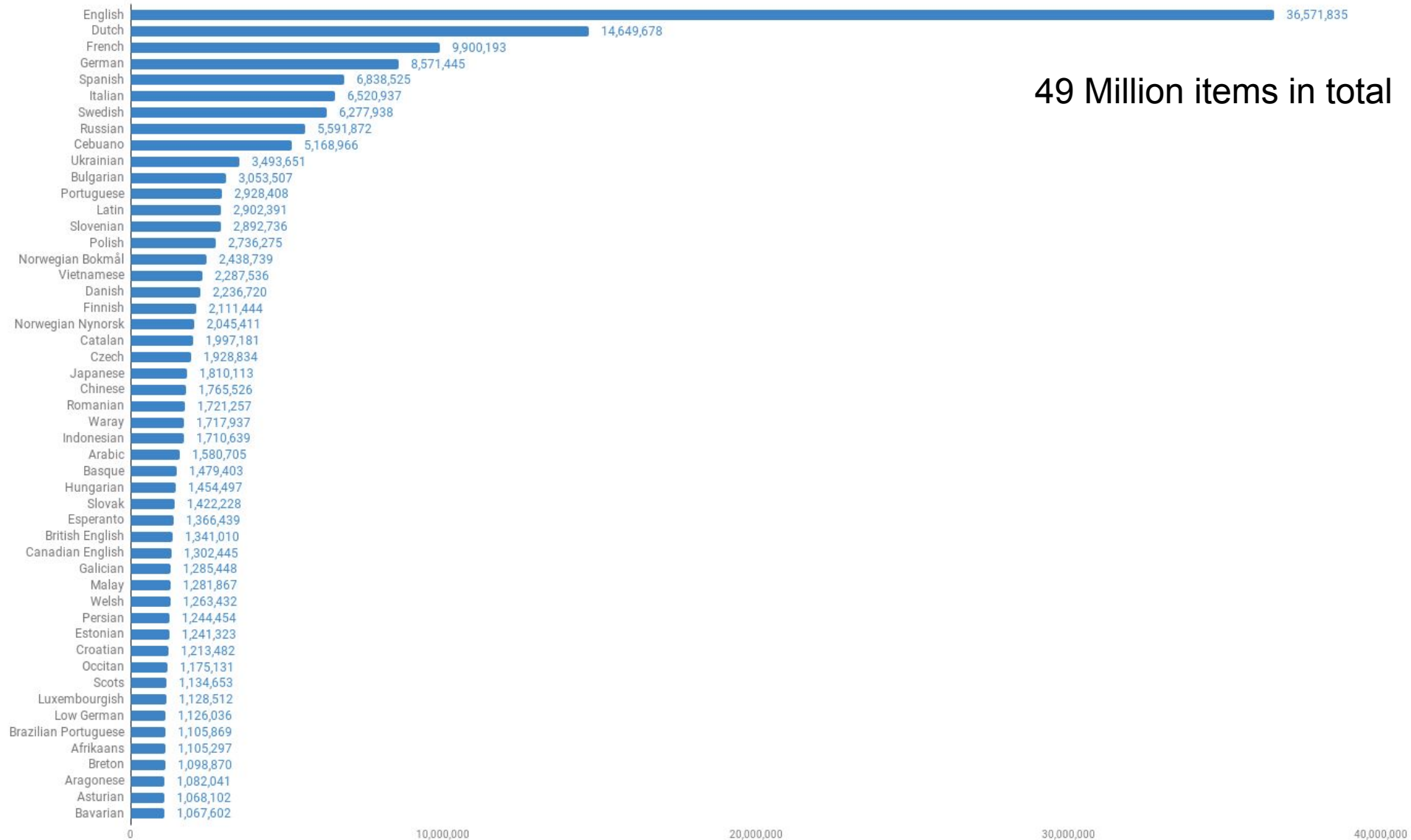
Friday, 10:05 am

DRWM

Number of labels per language on Wikidata - the long tail



Number of labels per language on Wikidata - the top 50



Wikidata & Wikimedia projects

Museu del Louvre [Amaga]



museu d'art i arqueologia de França

Viquipèdia

Instància de museu d'art

Part de Établissement public du musée du Louvre (1 January 1993, Q11680174)

Ubicació Palau del Louvre, París, 1r districte de París, França

Adreça Rue de Rivoli 75058

Ubicació de la seu Palau del Louvre (48°51'39.91"N 2°20'8.71"E)

Gestor/operator Service des Musées de France

Data de creació o fundació 1792

Data d'obertura oficial 1793

[lloc web oficial](#)

Control d'autoritats [Amaga]

identificador VIAF: 257711507

identificador GND: 1006837-5

Augustus John



Ganwyd 4 Ionawr 1878 [Dinbych-y-pysgod](#)

Bu farw 31 Hydref 1961 (83 oed) [Fordingbridge](#)

Cenedl Cymru

Alma mater Ysgol Gelfyddyd Gain Slade

Galwedigaeth arlunydd, ysgythrwr

Gwaith nodedig Madame Suggia, Man met pijp

Arddull portread

Priod Dorelia McNeill, Evelyn St. Croix Fleming

Plant Amaryllis Fleming

Teulu Gwen John

Delwedd	Teitl y llun	Dyddiad	Casgliad	Wicidata
	Dorelia with a feathered hat	1906	Amgueddfa Fitzwilliam	Q50821498
	W.B. Yeats	1907	Orielau Tate Yr Oriol Genedlaethol	Q28545299
	David and Dorelia in Normandy	1908	Amgueddfa Fitzwilliam	Q50820156
	Sir William Nicholson	1909	Amgueddfa Fitzwilliam	Q50820844
	Portrait of Caspar	1909	Amgueddfa Fitzwilliam	Q50820847
	Boy on a Cliff Leaning on a Stick	1910	Q1568434	Q49202622
	A Woman Reading - Provençal Study	1910	Q1568434	Q49202704
	Dorelia and the children at Martigues	1910	Amgueddfa Fitzwilliam	Q50813261
	Woman with a daffodil	1910	Amgueddfa Fitzwilliam	Q50820843
	Girl leaning on a stick	1910	Amgueddfa Fitzwilliam	Q50821494
	The Blue Pool	1910	Amgueddfa Fitzwilliam	Q50821497
	Portrait of a Woman	1911	Orielau Tate Yr Oriol Genedlaethol	Q28540968
	Dorelia by the caravan	1911	Amgueddfa Fitzwilliam	Q50820161
	Robin	1912	Orielau Tate Yr Oriol Genedlaethol	Q28533250
	David and Caspar	1912	Amgueddfa Fitzwilliam	Q50817280
	Dorelia wearing a turban	1912	Amgueddfa Fitzwilliam	Q50820165
	Pen merch mewn penwisg gwyn	1913	Amgueddfa Gelf Philadelphia	Q20816527



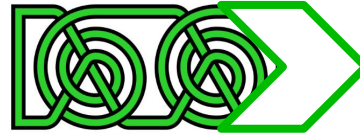
Infoboxes workshop

by Pau Cabot

Today, 16:10

Education Room

ArticlePlaceholder



ArticlePlaceholder session

by Hady Elsahar

Today, 14:10

Education Room

Siege of Sidney Street

siege

enghraifft o'r canlynol

[Gwarchae](#)

label yn yr iaith frodorol

Siege of Sidney Street

gwladwriaeth

[Y Deyrnas Unedig](#)

lleolir yn yr ardal weinyddol

East End of London

cyfesurynnau'r lleoliad

51°31′5.66″N, 0°3′19.76″W

pwynt mewn amser

3 Ionawr 1911

categori Comin

[Siege of Sidney Street](#)



Adnoddau allanol

dynodwr Freebase [/m/02v33b^{\[1\]}](#)

YouTube video ID [v0WPKpAVDGE](#)

Cyfeiriadau

- ↑ Freebase Data Dumps, 28 Hydref 2013

Creu erthygl

Queries to help improving Wikipedia

The 10 topics that have the biggest number of articles on Wikipedias, but not on Welsh Wikipedia



[commons:Abkhazia map-fr.svg](#)
164
Q Abkhazia



[commons:Somers Francis Bacon.jpg](#)
159
Q Francis Bacon



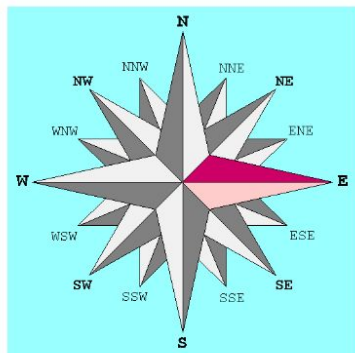
[commons:Rafael Correa in France \(cr...\)](#)
156
Q Rafael Correa



[commons:Felix Nadar 1820-1910...](#)
153
Q Jules Verne



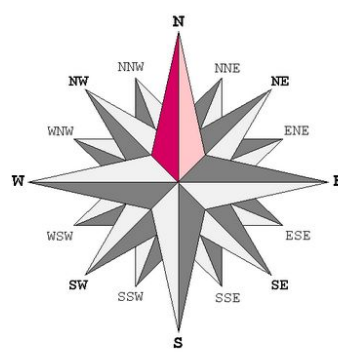
[commons:Radio Studio 54 Angels.jpg](#)
150
Q Radio Studio 54 Network



[commons:CompassRose16 E.png](#)
149
Q east



[commons:Fox study 6.jpg](#)
149
Q Vulpes vulpes



[commons:CompassRose16 white.PNG](#)
146
Q north



[commons:Leopard africa.jpg](#)
146
Q leopard



[commons:Panthera pardus close up.jpg](#)
146
Q leopard

Lexicographical data on Wikidata

(L2285)

CWRW

cy

Session

Language [Welsh](#)

Lexical Category [noun](#)

Statements

Forms

L2285-F1

cyrfau

cy

Grammatical features [plural](#)

Statements about L2285-F1

L2285-F2

cwrw

cy

Grammatical features [singular](#)

Statements about L2285-F2



Lexicographical data session

by Léa Lacroix

Today, 14:35

Education Room

How you can help sharing your language

Add labels, descriptions, aliases in your language

A query that you can easily edit:

=> [1000 places in the UK that have a label in English but not in Welsh](#)



Translathon
by Nicolas Vigneron
Today, 15:00
Education Room

Review possible vandalism with [this dashboard](#)

Edit ID	Entity ID	Username	Entity title	Edit summary	ORES damaging score
703140751	Q1811372	Usuari 951924592	Territori d'Alaska	Changed label in ca: Territori d'Alaska	0.935
703119567	Q5624458	Beethoven	Plantilla:Episode list	Changed label in ca: Plantilla:Episode list	0.434
702983796	Q29867219	80.30.69.166	Referèndum constitucional de les Illes Fèroe de 2018	Added description in ca: Referèndum	0.981
702983794	Q29867219	80.30.69.166	Referèndum constitucional de les Illes Fèroe de 2018	Added label in ca: Referèndum constitucional de les Illes Fèroe de 2018	0.966
702890463	Q11926235	BerdeGaralko	Hèrmies	Removed description in ca: pàgina de desambiguació de Wikimedia	0.159
702889757	Q360270	BerdeGaralko		Removed description in ca: Pàgina de desambiguació	0.573
702880686	Q19844712	37.133.70.207	Luka Dončić	Changed description in ca: Jugador de basquetbol eslovè	0.984
702857229	Q55214868	Srnais	Dolores Cabrera Heredia	Added alias in ca: Dolores Cabrera y Heredia, Dolores Cabrera de Miranda	0.528

How to start?

- Create an account on the Wikimedia projects
- Check items about things you know
- Try the query service
- More informations: <https://www.wikidata.org/wiki/Help:Contents>
- Ask questions on IRC: #wikidata or Twitter @Wikidata

Thanks for your attention!

Let's stay in touch:

Léa Lacroix

Community communication for Wikidata

lea.lacroix@wikimedia.de

@Auregann