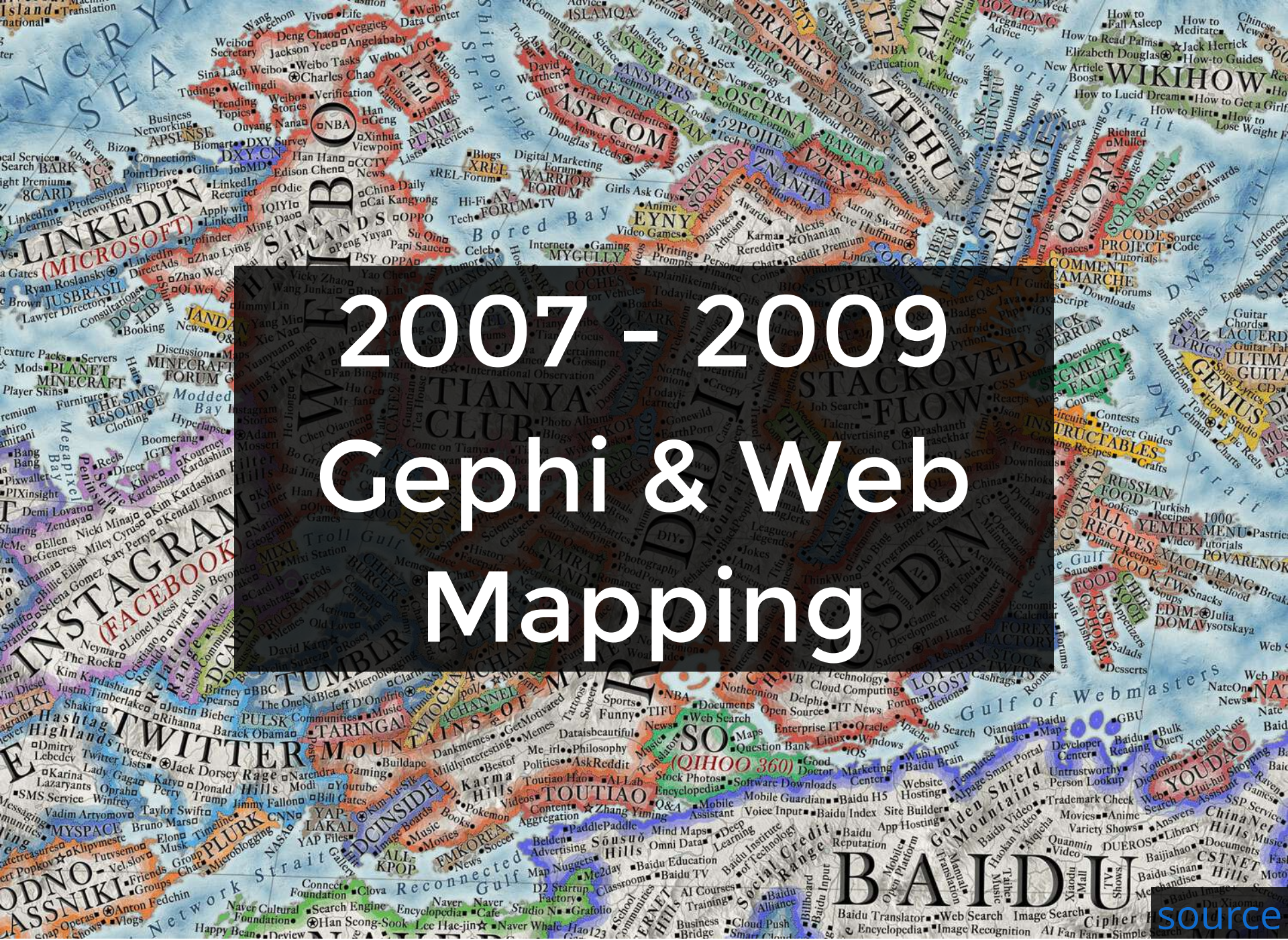


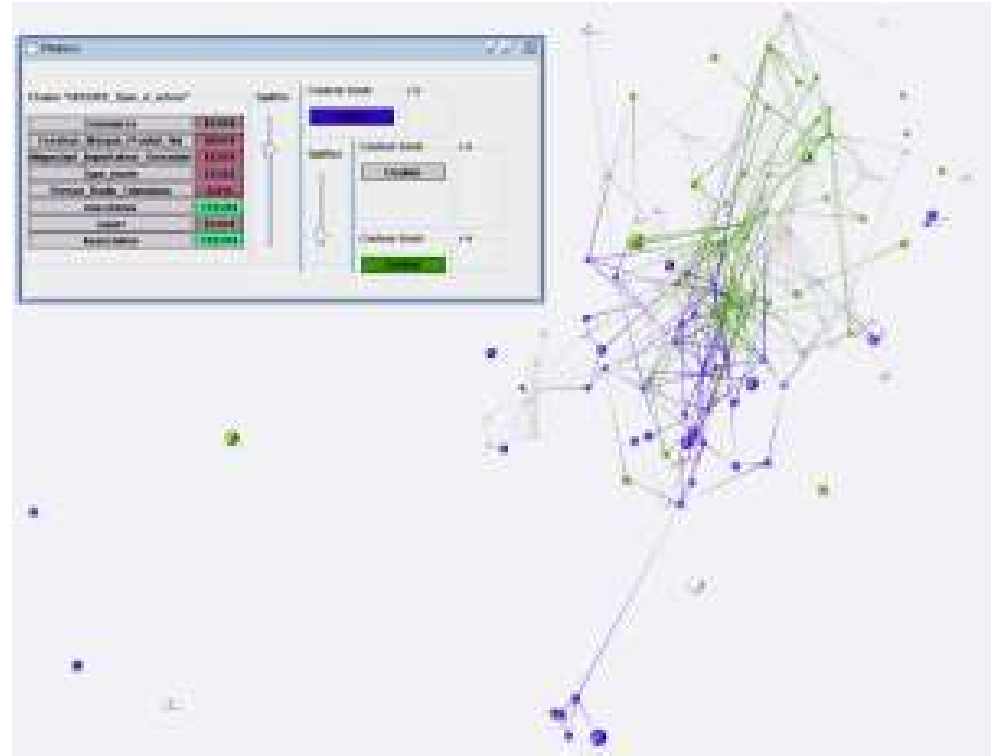


# Bridging Research and Open Source the genesis of Gephi Lite

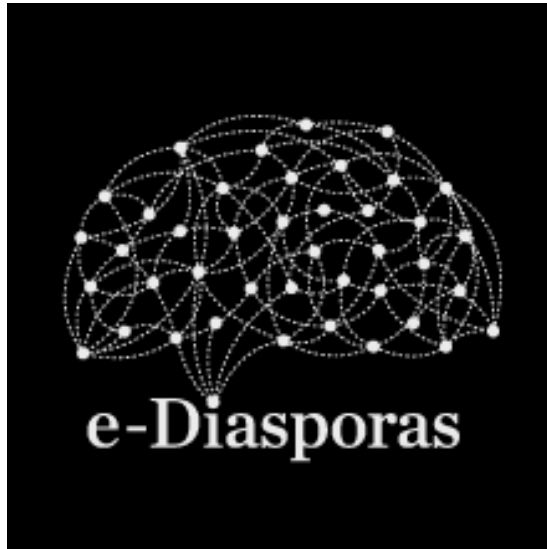
FOSDEM 2024, 3 February 2024  
Open Research devroom



# 2007 - 2009 Gephi & Web Mapping

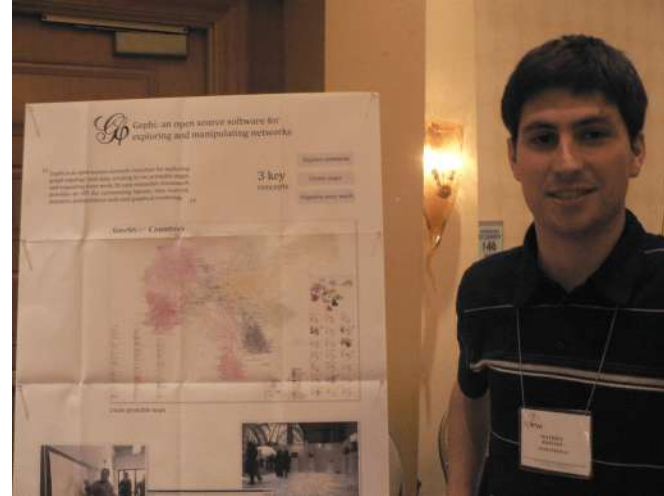


WebAtlas at **UTC, Compiègne**  
**Graphiltre, prototype of Gephi**

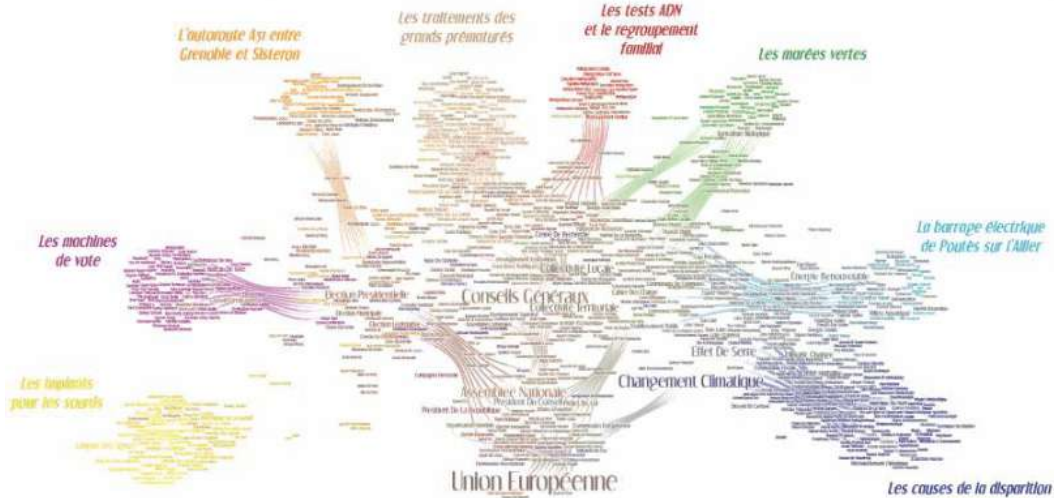


*Gp* Gephi


**TIC-Migrations and the  
first Gephi version**



ICWSM 2009 - the "Gephi paper"  
later wins *Test of Time Award*



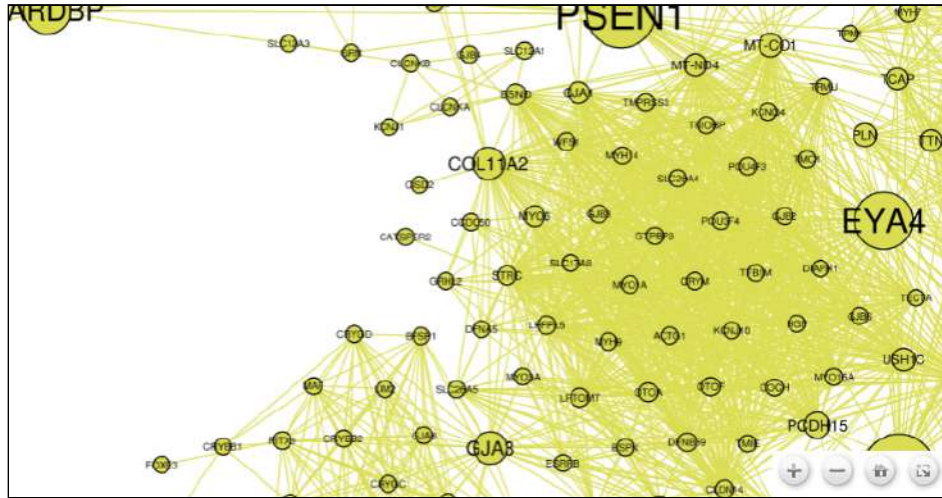
Gephi graphs printed on paper



**2010 - 2012**  
**Sharing networks**  
**online**

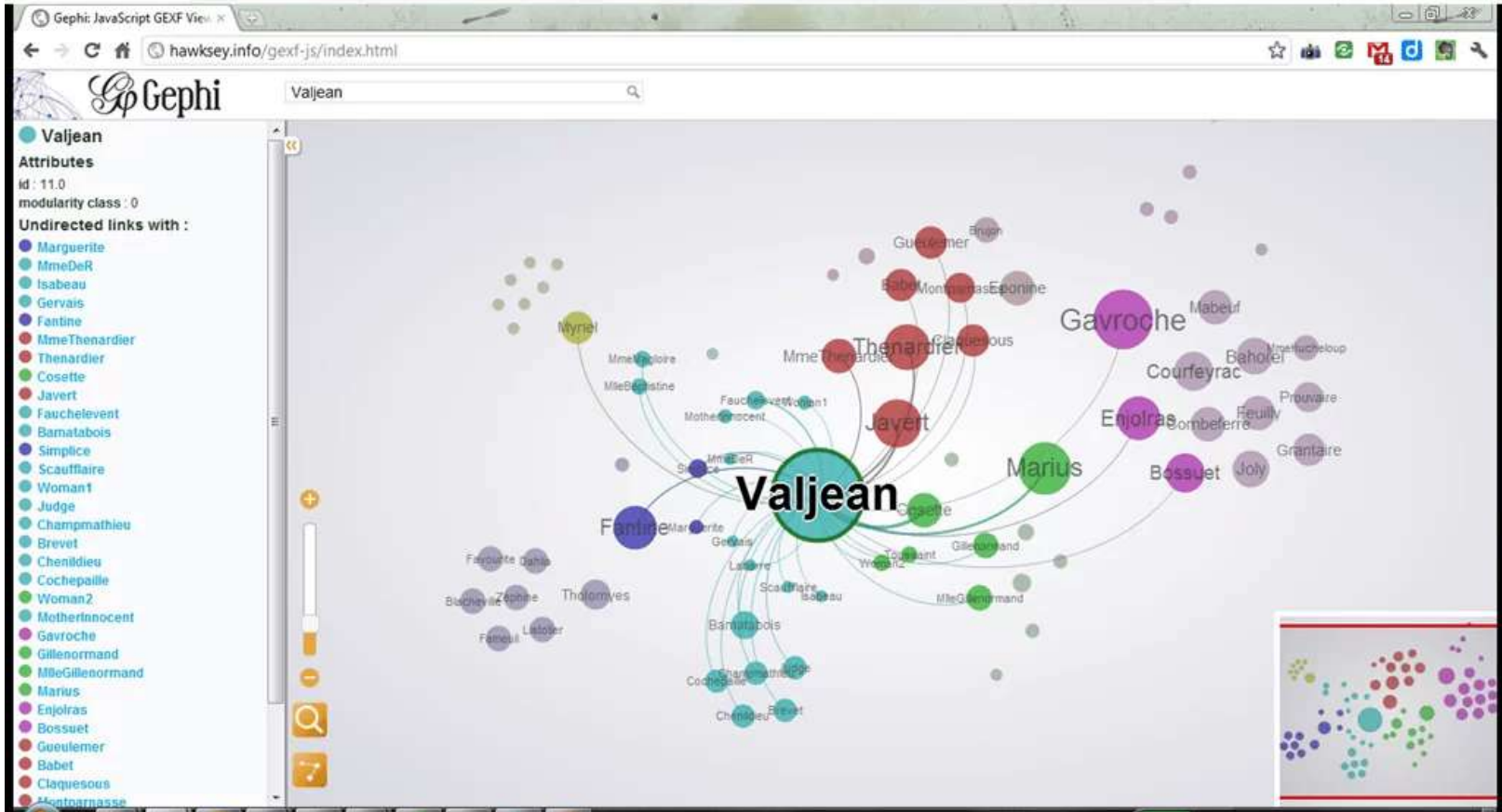






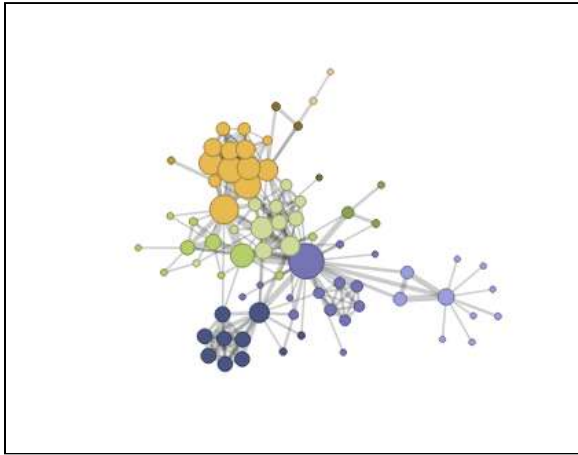
# SeaDragon Gephi export

on [Gephi's blog](#)



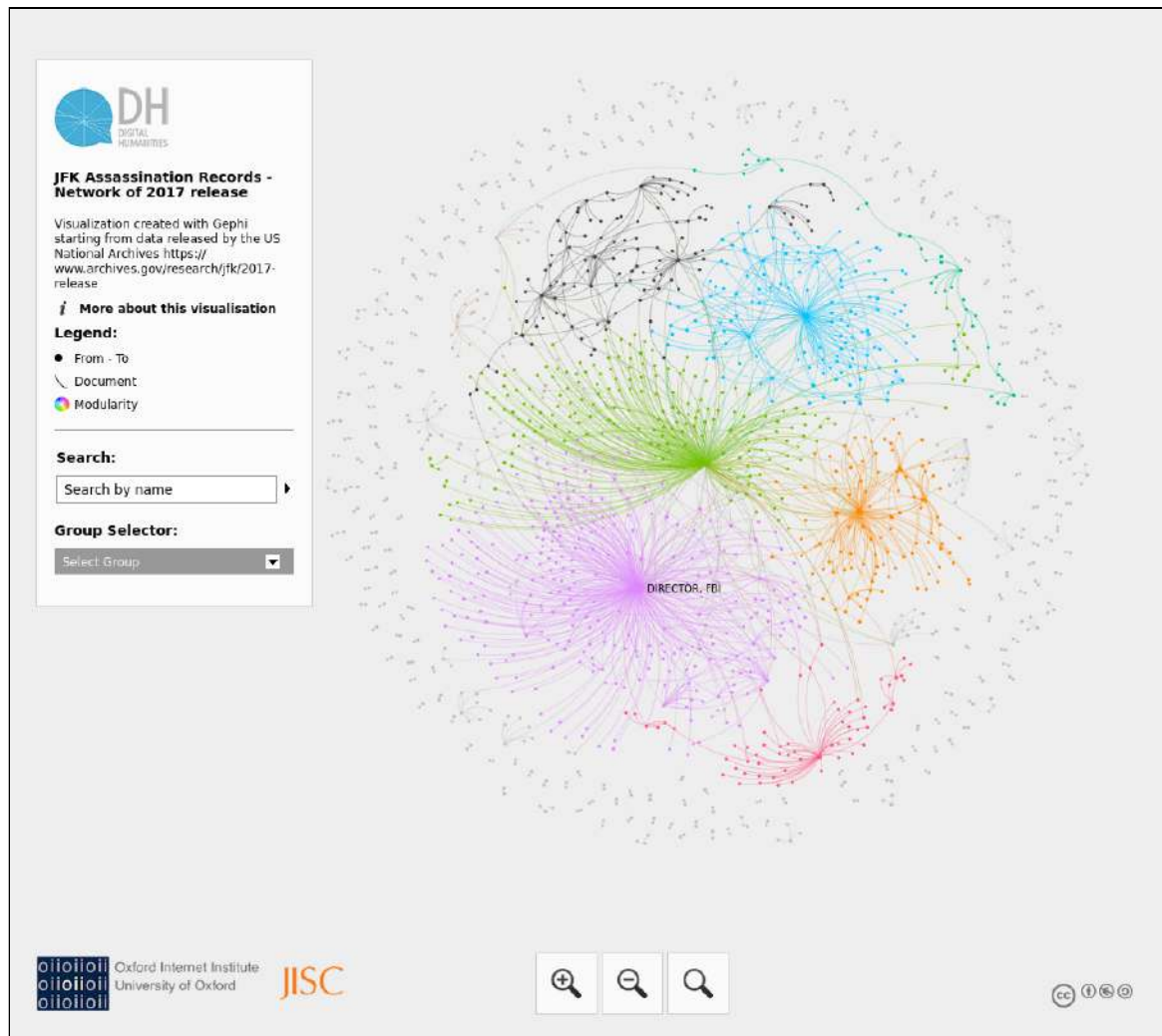
# GEXF.js

sources, working online demo



# JavaScript graph rendering engines

Protovis, D3.js, [sigma.js](#) v0



# Gephi Sigma.js Exporter

sources, working online demo



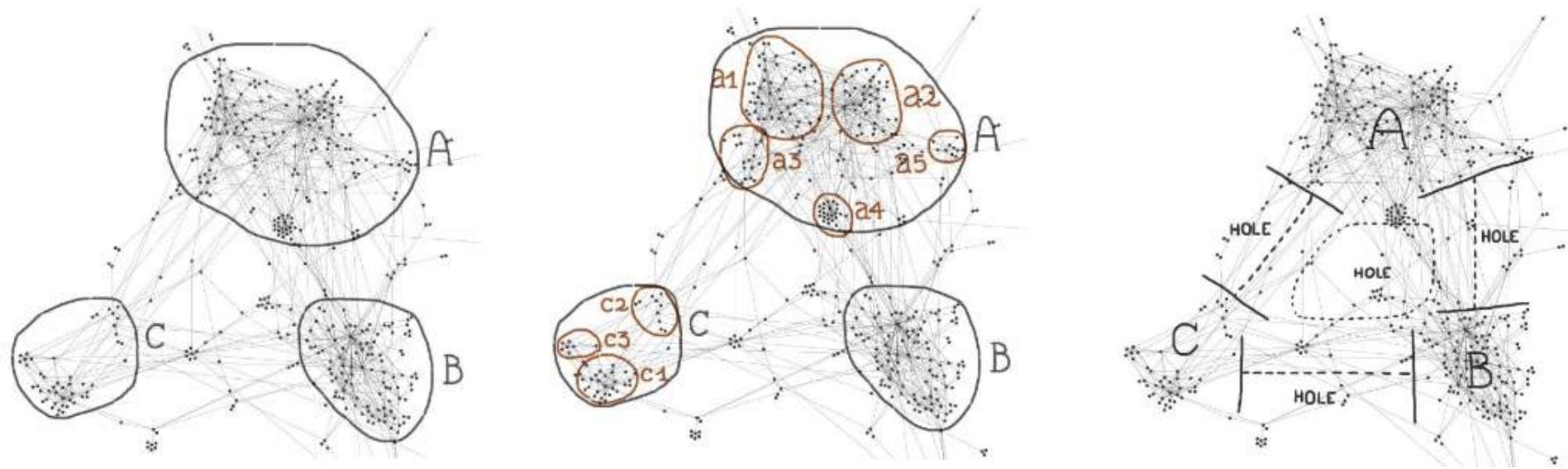
**2013 - 2015**  
**Exploring networks  
online**

# Social scientists need more tools?

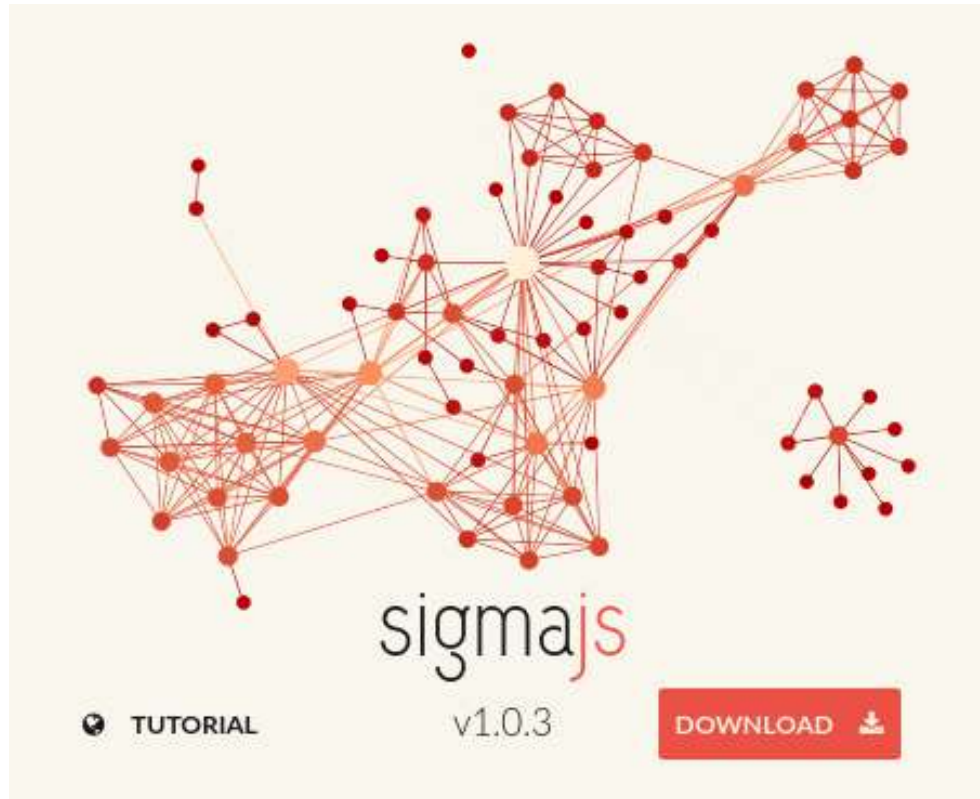


**SciencesPo**  
MÉDIALAB

**Sciences-Po médialab  
delivers**

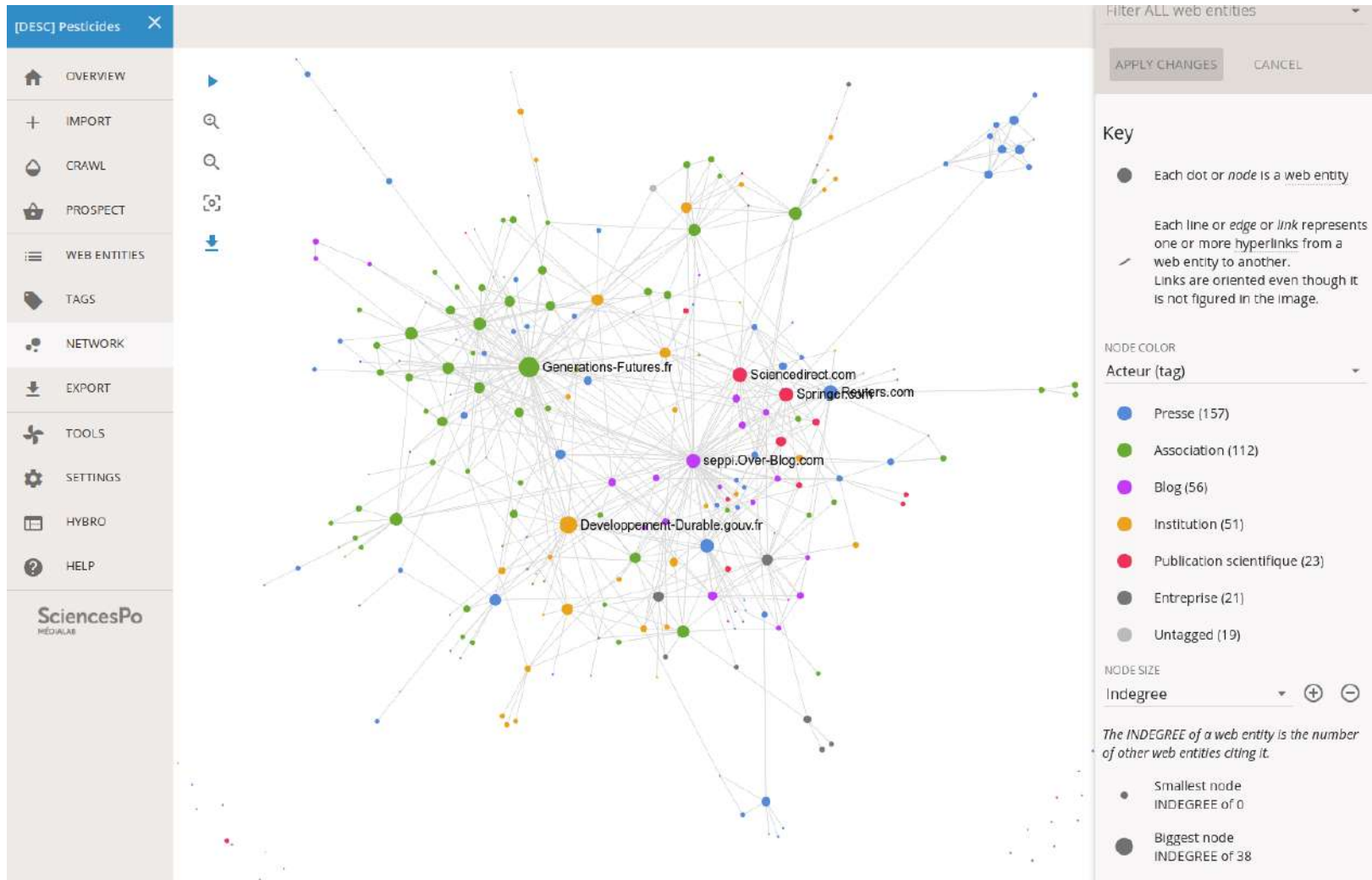


# Visual Network Analysis



# sigma.js v1





Hyphe integrates sigma.js



< 1 of 10

These are the wikipedia pages about Gambling

## 2 Internet addiction disorder

Close to the "Gambling addiction" cluster one can find the "Internet addicton disorder". Two addictions on Internet.

3 of 10 >

A tentative to control addiction

# ManyLines

sources

A person wearing a green long-sleeved shirt and work gloves is using a Hitachi power tool, likely a reciprocating saw, to cut through a metal object. The tool is positioned vertically, and a large volume of bright orange and yellow sparks is being ejected from the cutting point, creating a dramatic, high-contrast scene. The background is dark, making the sparks stand out prominently. The Hitachi logo and slogan are visible on the person's shirt.

**HITACHI**  
*Inspire the Next*

# 2016 - 2018 Tinkering networks online



**graphology**

*handles **graph**  
data model &  
algorithms*

+



**sigma.js**

*handles **graph**  
rendering &  
interactions*

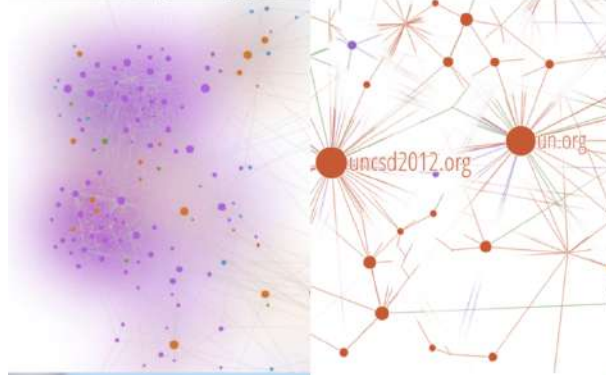
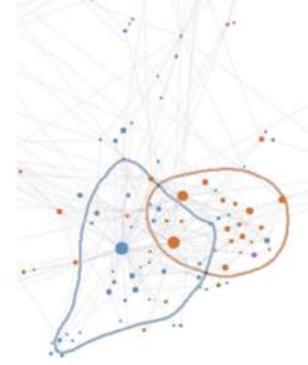
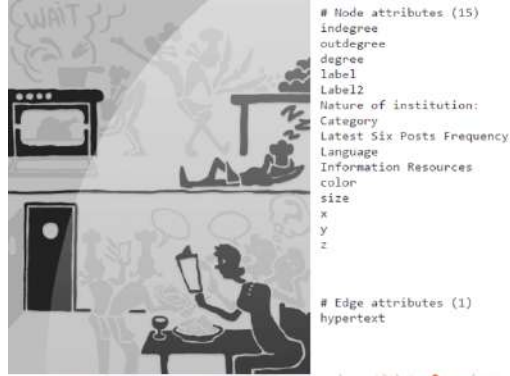
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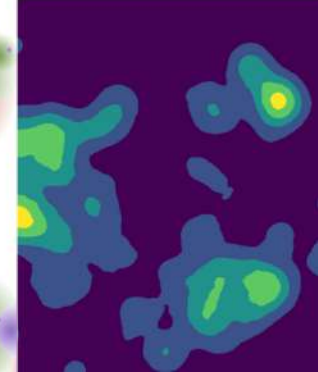
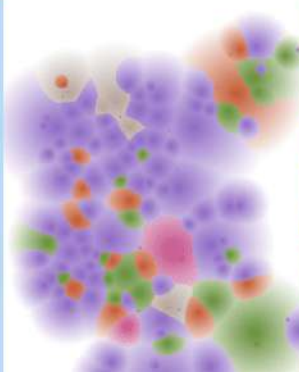
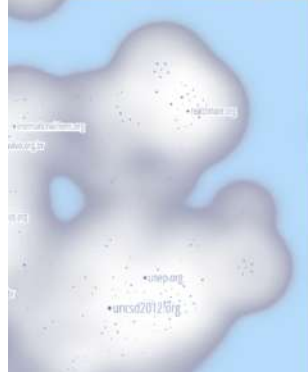
**your ♥ web  
app**

# Graphology

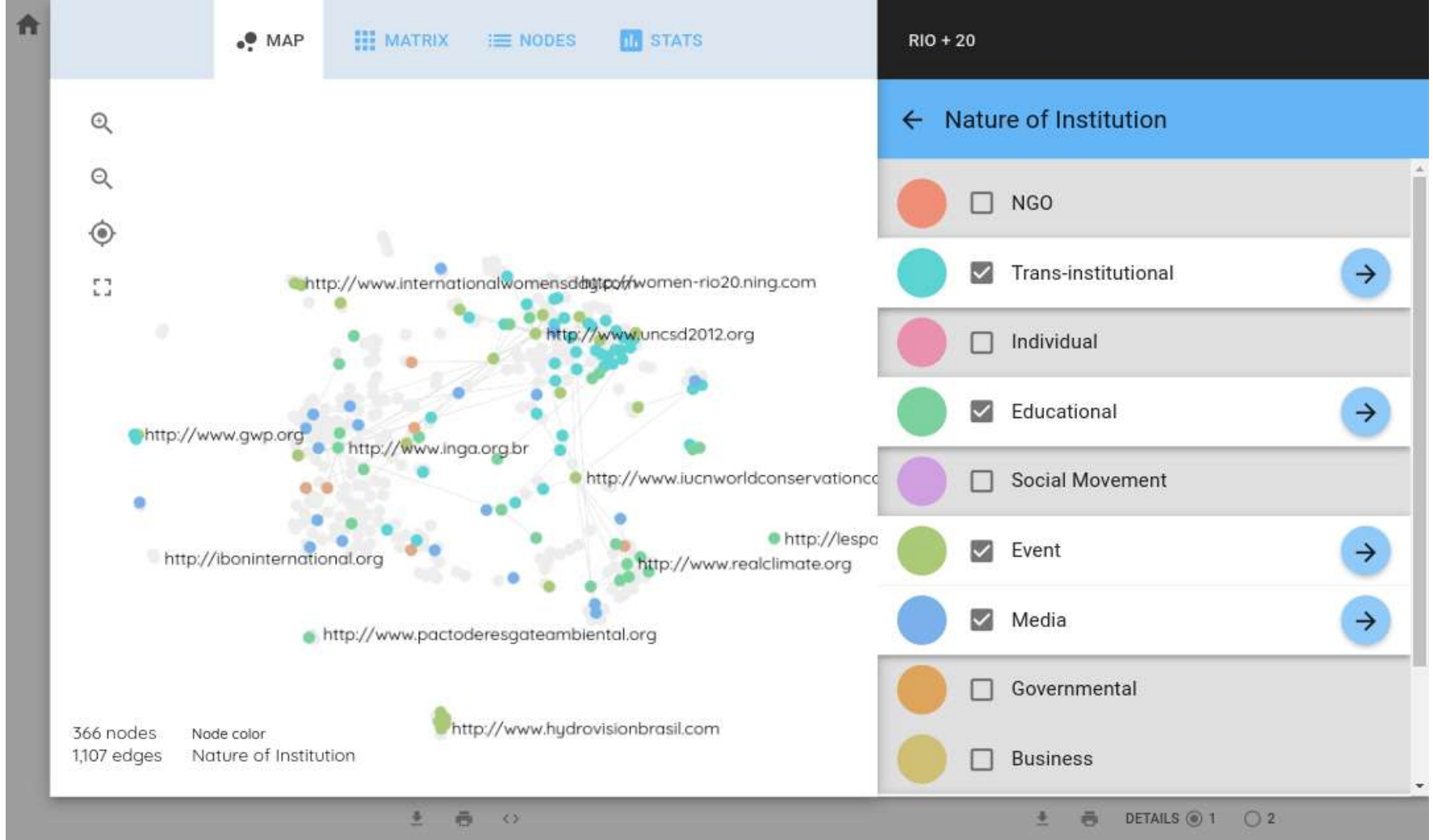
[sources, website](#)



	English	Portuguese	All	Spanish	French
English	272	39	129	11	2
Portuguese	29	275	79	6	0
All	45	62	75	7	2
Spanish	22	13	9	2	0
French	10	3	8	0	6



Graph Recipes - [link](#)



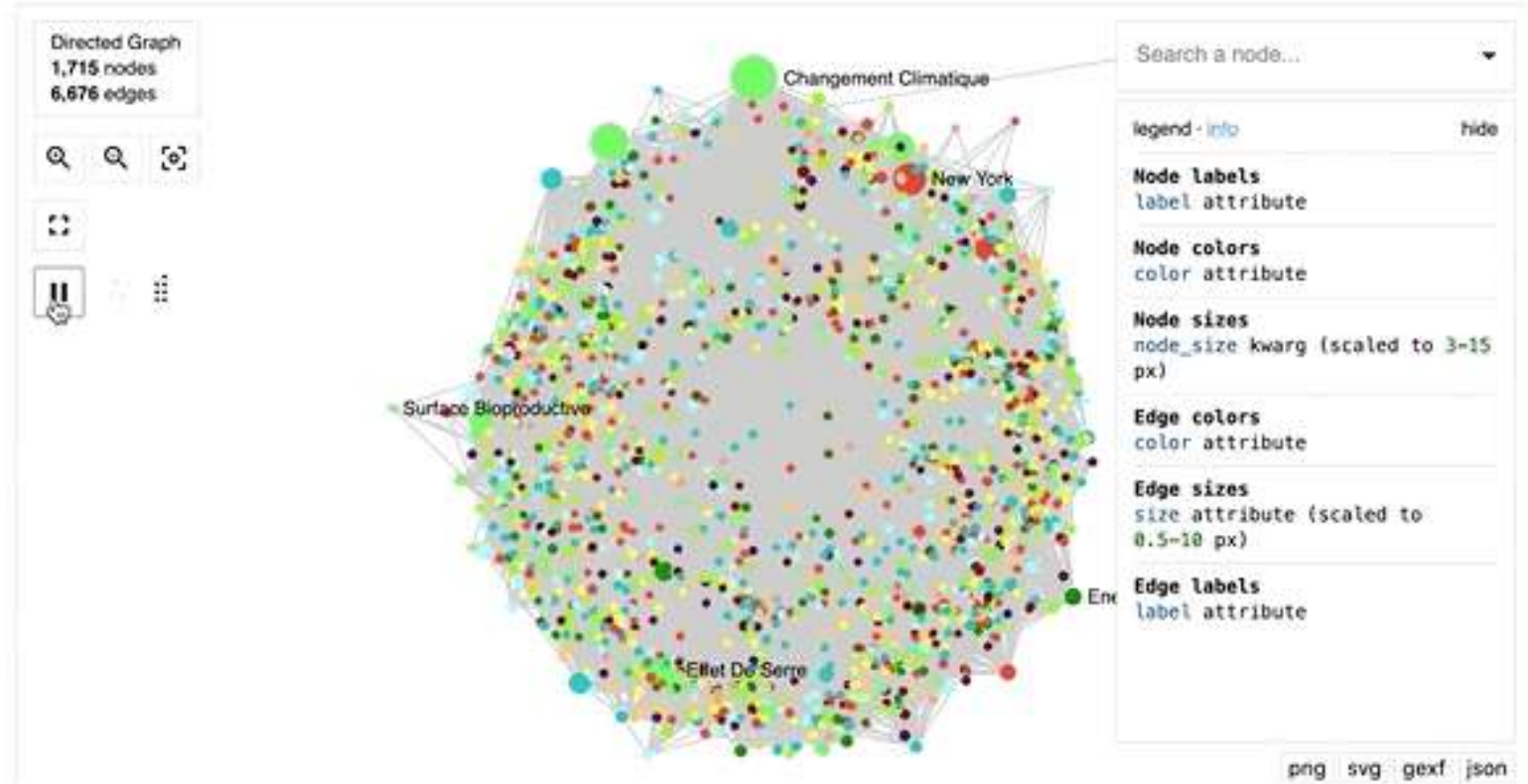
# MiniVan

sources, website

```
[1]: import networkx as nx  
     from ipysigma import Sigma
```

```
[2]: g = nx.read_gexf('./data/arctic-no-positions.gexf')
```

```
[3]: Sigma(g, node_size=g.degree)
```



ipysigma  
link



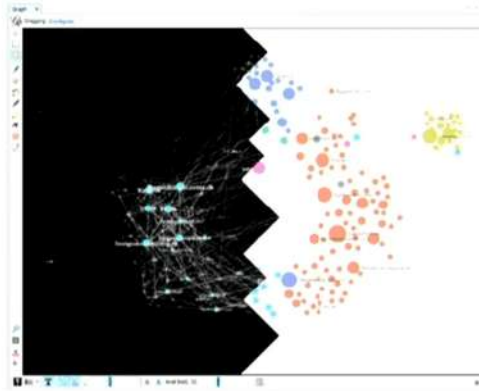
since 2019  
Convergences





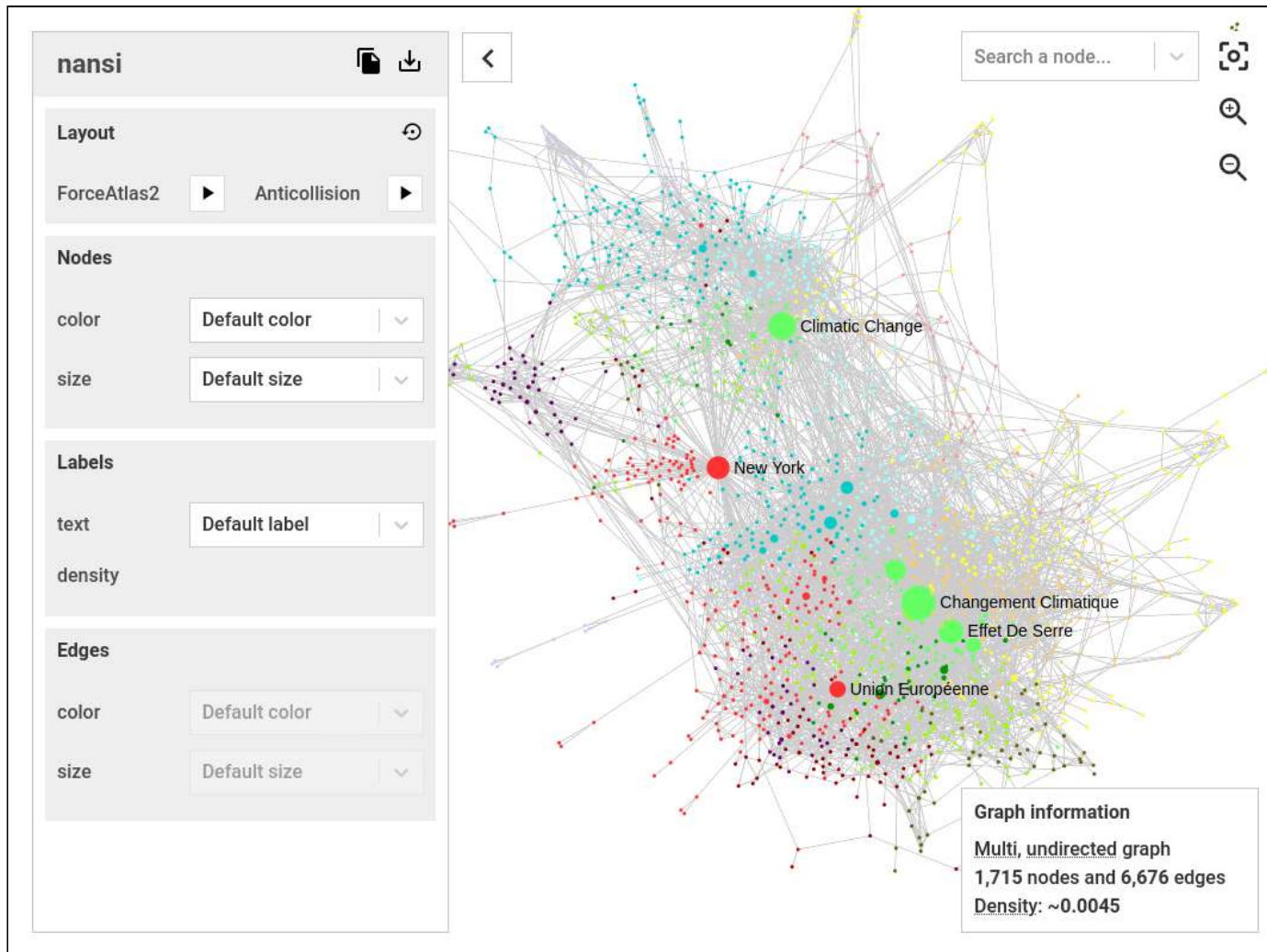
## Gephi JS

Exploring the dystopian future of a JavaScript Gephi



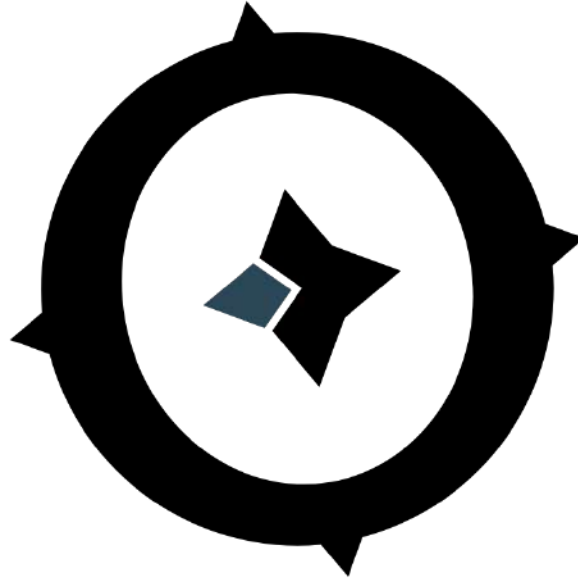
# Gephi.js?

FOSDEM presentation



# Nansi

link



**QuestWare**

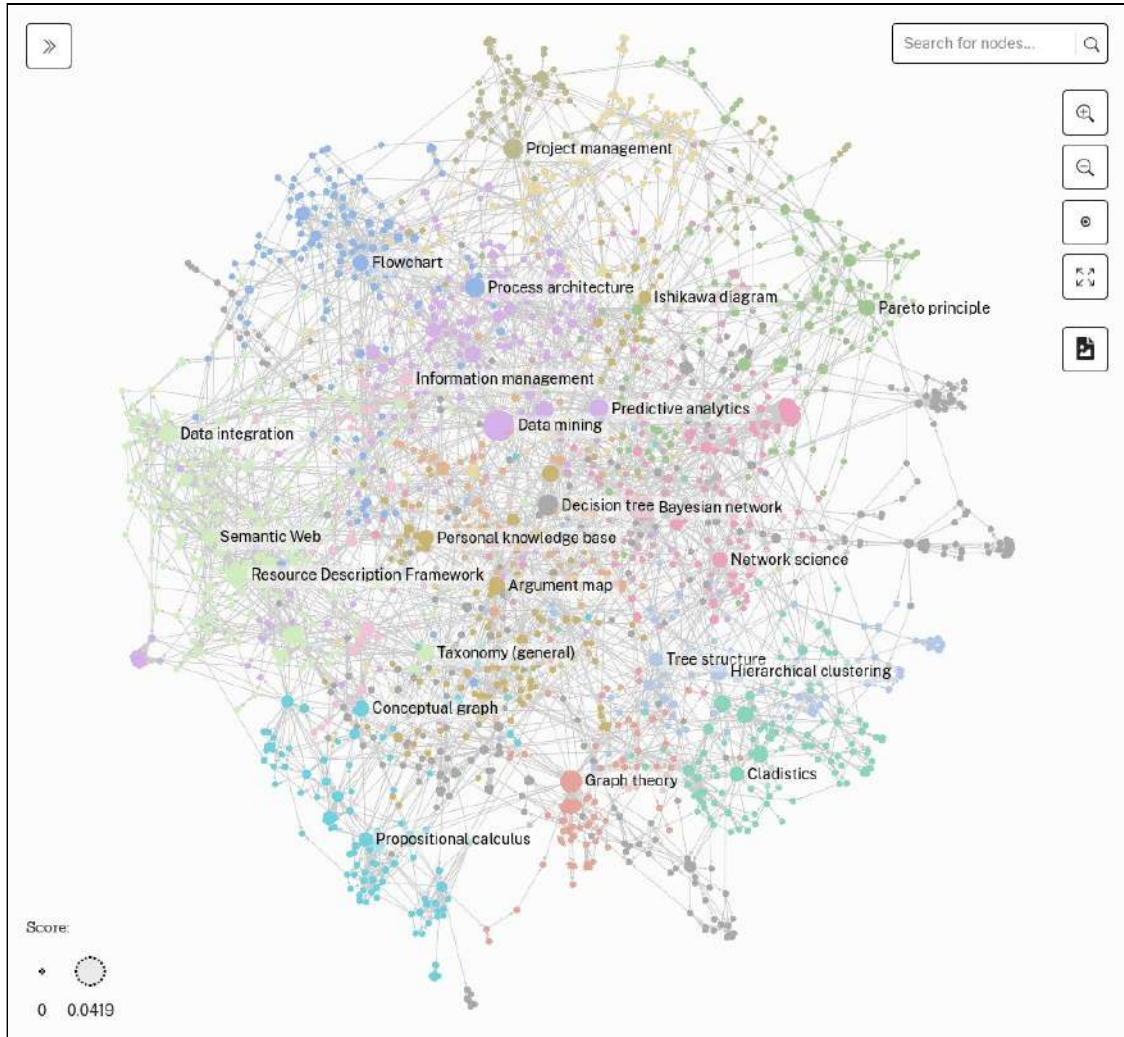
[questware.com](http://questware.com)



*a JavaScript library aimed at visualizing  
graphs of thousands of nodes and edges*

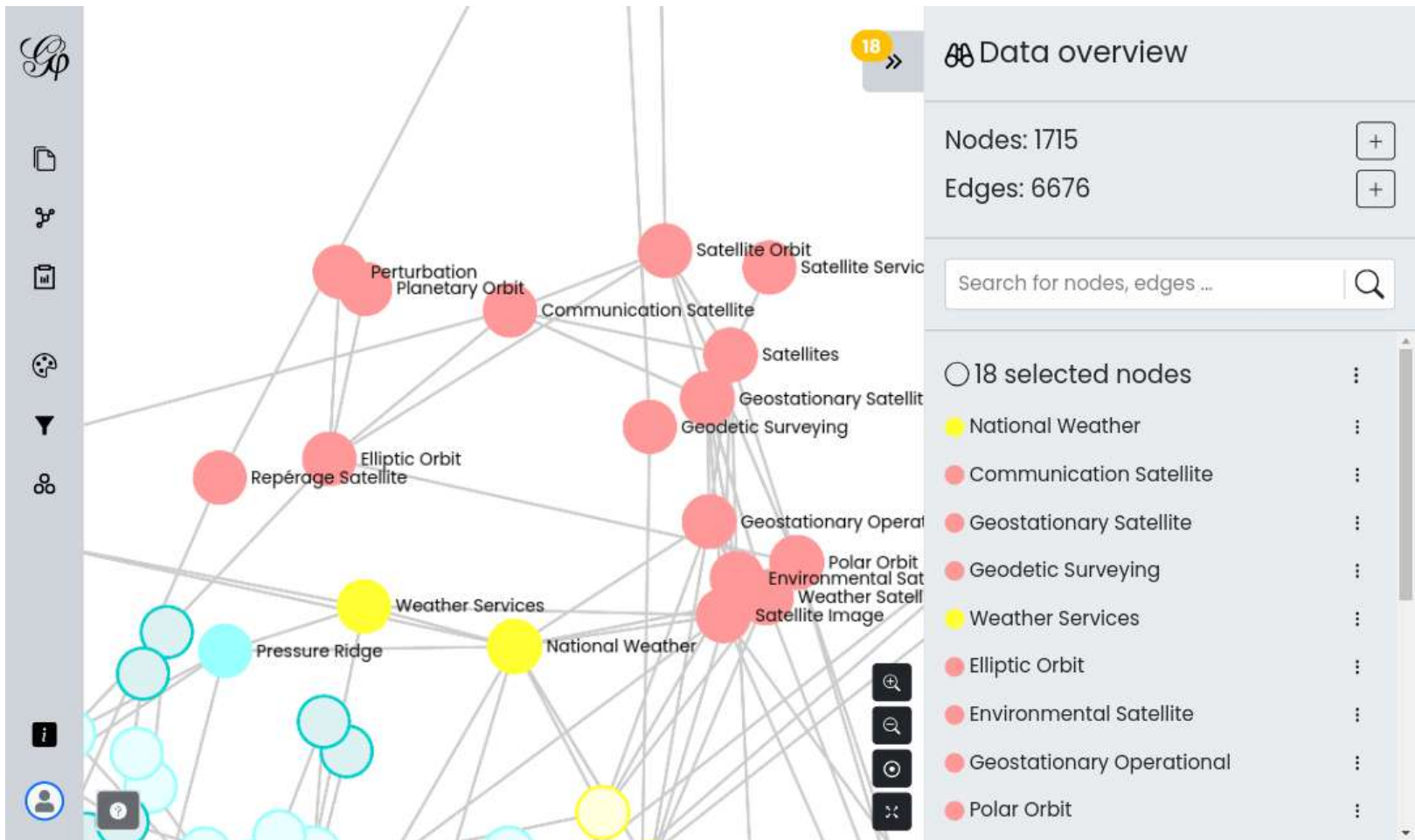
**sigma.js v2**

**made by both OquestWare and Sciences-  
Po médialab**



# Retina

[link](#)



# Gephi Lite

[sources, website](#)

**what is Gephi Lite?**

**it's kind of Gephi,  
on the Web  
but lighter**



**it is a full-client Web  
application**

**everything happens in the  
Web browser**

interactive demo

[gephi.org/gephi-lite](http://gephi.org/gephi-lite)

**So... what enabled  
Gephi Lite?**

Gephi has an amazing  
**community**

**we all released lots of  
tools to try things**

**some are still used, some  
are no more available, some  
failed...**

**thanks [Internet Archive](#) ❤️**

**the Web is an  
amazing platform**

**also, making Gephi Lite a  
full-client app makes it very  
easy to deploy, port, fork...**

many of these tools only exist  
thanks to **academics** needs,  
design and support

**our customers hired us to  
develop, maintain or improve  
FLOSS tools**



**FOSDEM** made us meet,  
discuss, and challenge  
these tools

at least 10 FOSDEM talks about  
these tools since 2012

**thanks**

[contact@ouestware.com](mailto:contact@ouestware.com)