Experiments and White Paper

SOCIENTIZE

EU BON WORKSHOP 27 November 2014

Fermín Serrano Sanz University Zaragoza Fundación Ibercivis









SOCIENTIZE

www.socientize.eu

EU FP7 funded CSA-SA

Contract n°: RI-312902

Project type: CSA-SA

e-Infrs-→ Digital Science

Start date: 1/10/2012

Duration: 24 Months

Total budget: 709.999,86€

"impact disproportionately large"

Consortium:

Univ. Zaragoza, Tecnara (ES), Univ. Coimbra - Museu Ciencia Coimbra (PT), Univ. Fed. Campina Grande (BR), Zentrum fur Soziale Innovation (AU)

External Advisory Board:

David Anderson (BOINC – US), Drew Hemment (Future Everything – UK), Steven Bamford (Zooniverse – UK)

Subcontractors:

UB, CERN (selected from 16 proposals!)

Objectives

To foster interaction and coordination between citizen science actors

→ coordination, outreach and engagement

Promotion of capabilities of infrastructures

→ participatory experiments

Integration of solution and communities

→ deployment and support

Compilation of best practices and policy recommendations

→ policy recommendations

Approach

Open, collaborative, efficient, inclusive, exploratory, community-based

Coordination, outreach and engagement







mons, culture, crossover capability,

... what it takes to change





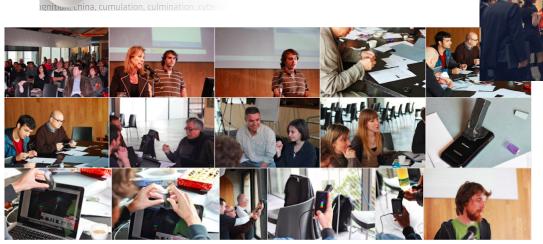












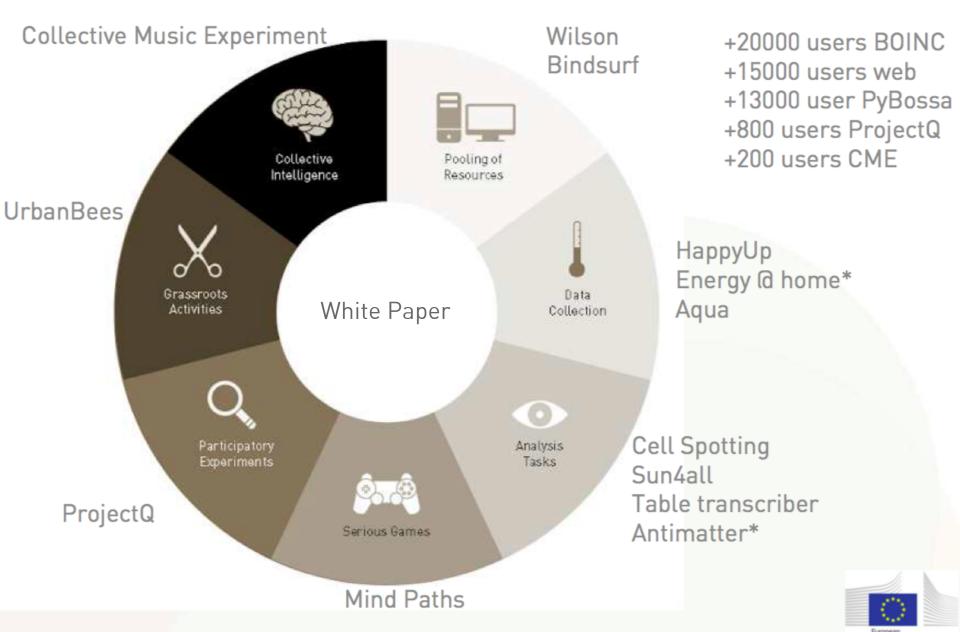




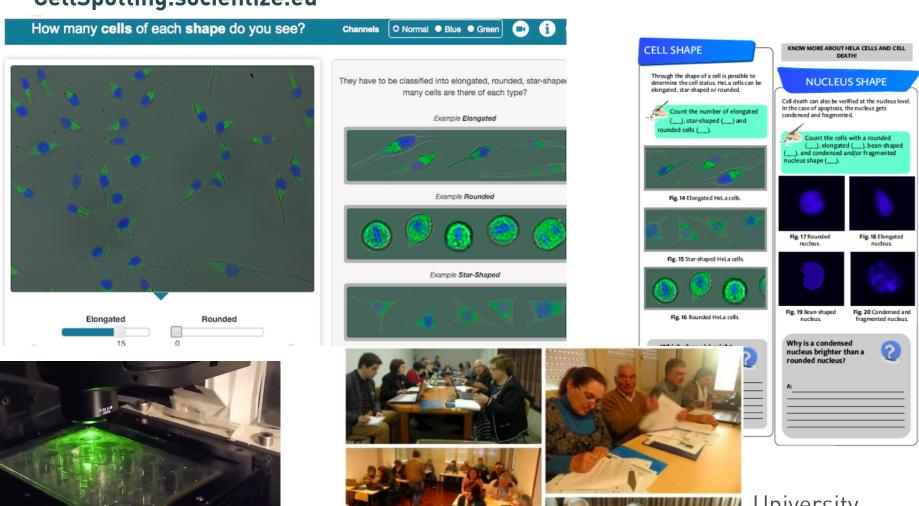


Commission

Participatory experiments



CellSpotting.socientize.eu



University
Of
Experience

CellSpotting.socientize.eu



Community



About

Sign in







Statistics



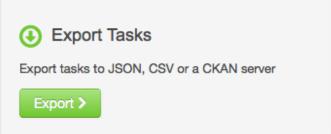
Cell Spotting: Tasks



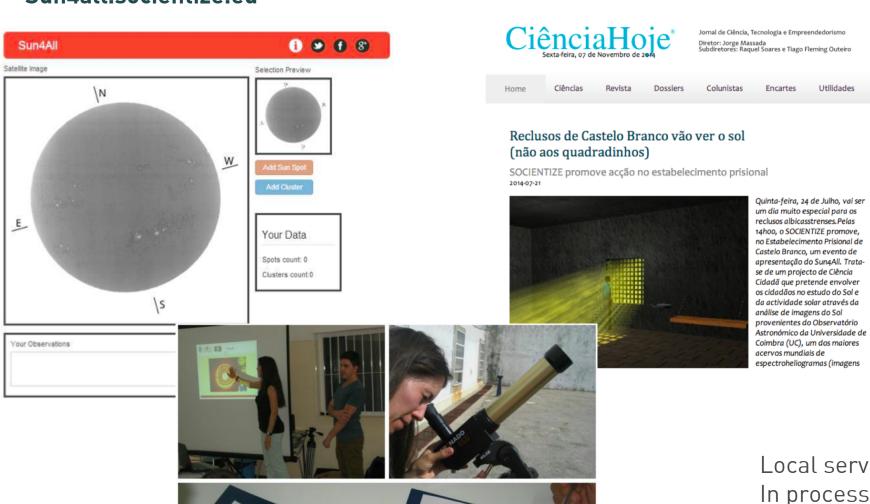
Overall progress: 83% completed

4067 Tasks





Sun4all.socientize.eu



Local servers In process

Urban Bees





CollectiveMusicExperiment.eu







A Europe 2020 Initiative

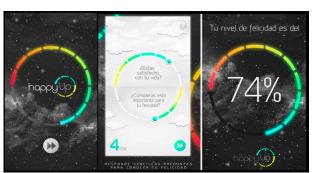




Other projects

Mind Paths



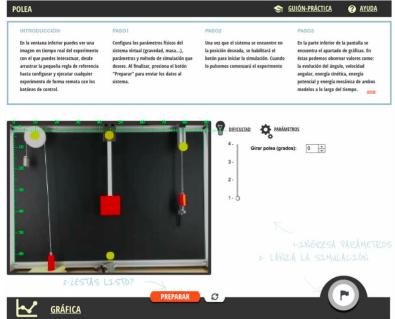






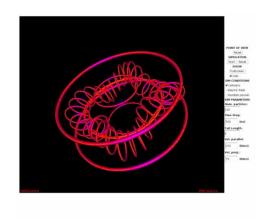
rrlab.bifi.es

Experi



savingenergy.socientize.eu





Virtual lab

Unexpected...

MENU



OPENCURIOSITY-FOLLOW-YOU-CURIOSITY-OPEN-YOUR-MIND



OpenCuriosity is an open source exomars rover, based on the NASA Curiosity rover, based on Arduino. We have used the 3d printing technology to prototype some parts. All the people will be allowed to use these Arduinos and sensors for their own creative purposes while they are in space. They will be allowed to integrate their project in the robot, and the data gathered will be available on the internet in order to share with the general public for educational, science or other purposes.

PROJECT INFORMATION

License: Common Public Attribution License 1.0 (CPAL-1.0)

Source Code/Project URL: https://github.com/luismartinnuez/OpenCuriosity

RESOURCES

Carlos Sicilia Project - http://www.youtube.com/channel/UCIgnjQmL78DIHMuank2THLg Luis Antonio Martín Nuez - https://www.youtube.com/user/luisantoniomartinuez













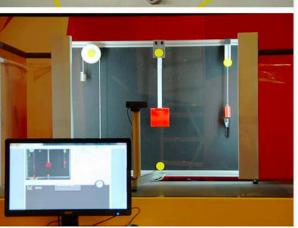
SpaceApps is a NASA incubator innovation program.



Ciencia Remix: Citizen Science lab/exhibition/space www.cienciaremix.es













Do you want to be on it?



Deployment and support

















































c based



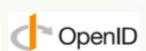
















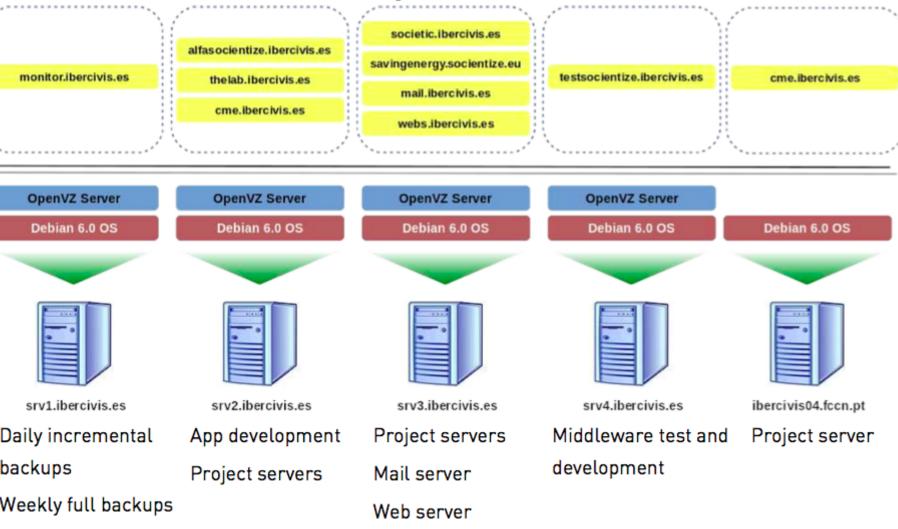








Infrastructure Description



Virtua

Hosts

Phys Serve

Policy recommendations

| Desktop research and mapping | Consortium Expertise | Experts interviews | _ | get groups ng sessions | Questionnaires | s ► VISION |
|---------------------------------------|-------------------------|--------------------|--------|---------------------------|----------------|------------------|
| Cross- cutting concerns | Areas in need of change | Dra recommer | - | Feedback | Revision | GREEN • PAPER |
| Dissemination | Onlin consulta | D 1 | ite Re | finement | Endorsement | WHITE ► PAPER |



Green Paper on Citizen Science.



+200 contributors
Complementary approach
Issues consolidated with stakeholders

Under revision

Available in www.socientize.eu





Macro level (EU-national policy makers)

To overcome domestic barriers with coordinated plans, programmes and investments

- → targeted programming
- → mainstreaming citizen science

Support measures

Updating educational and researcher programmes, evaluation criteria and curricula Including citizens in decision-making process

Broadening access to technology

Promoting EU-wide data policy (ownership, ethics, legal requirement, quality)

Recommendation

Citizen Science Think Tank for promotion, coordination, monitoring, evaluation, collaboration

Meso level (professional scafolding infrastructures, initiatives and institutions)

To identify, coordinate and support.

Crowdmapping.Guidelines. Customized assistance

To build inclusive communities and new interaction channels

Engage general public in decision-making processes

To recognise ongoing outsider research initiative

Alternative funding mechanisms and spaces for bottom-up efforts

Recommendation

Citizen Science Do Tank with specific/adaptable/dynamic guidelines

Shared technologies, hardware, middleware, software, repositories

Engagement strategies and actions, communication, outreach, inreach,

Education and learning materials

Metrics, monitoring, collective and dynamic evaluation

Shared data repositories, quality guidelines, standardization

Funding opportunities

FOUNDATION

- Universidad de Zaragoza
- CSIC
- CIEMAT
- Red.es
- Fundación Ikerbasque
- Fundación Zaragoza Ciudad del Conocimiento
- Gobierno de Aragón
- Ministerio de Economía y Competitividad



Universidad Zaragoza





Fundación

ibercivis











COLABORATORS







PORTUGAL

- Agencia para la Sociedad del Conocimiento (UMIC)
- · Centro para la Neurociencia y Biología Celular (CNC)
- Laboratorio de Instrumentación y Física Experimental de Partículas (LIP)
- Fundación para la Computación Científica Nacional (FCCN)
- Agencia Nacional para la Cultura Científica y Tecnológica (Live Science)

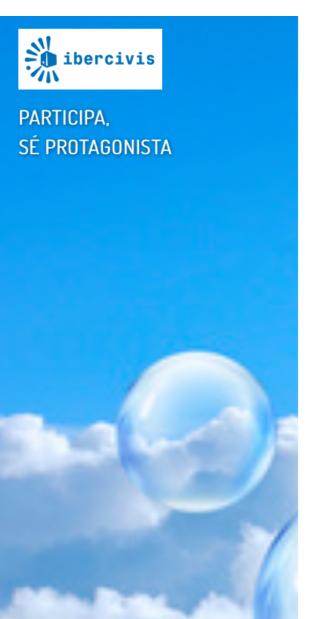












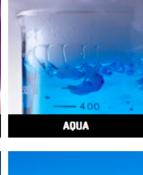


EXPERIMENTOS DESTACADOS



COLECTIVA-MENTE







IDIOMA

EN ES PT

CROWDFUNDING



BUSCAR

ACTUALIDAD

Proyecto Socientize en el periódico "La voz de Galicia"

Resumen Jornadas D+I, divulgación innovadora

Experimento Colectivamente en Tercer Milenio

EVENTOS

Próxima mesa redonda "Ciencia Ciudadana EU BON" en Berlín. 27 de noviembre 2014

CSIC 75 Aniversario -



LAUNCH YOUR EXPERIMENT

We promote, carry out and trust citizen science. We offer different types of CITIZEN SCIENCE, so that the scientific community can entrust their applications with us. Ibercivis supports researchers in different areas whose computational needs and data collection are high.

HOW TO CONTRIBUTE?

Put your computer to work for science Doing simple tasks Gather and provide scientific data Participating in experiments



HOW DO THE GROUPS CARRY OUT RESEARCH?

Numerical simulations Analyzing Data By outsourcing tasks Experimental data

DO YOU WANT TO USE BOINC?

We provide a computer network through which the calculation capacity is assured. We are open to a wide range of migration, each adaptation process may be different.

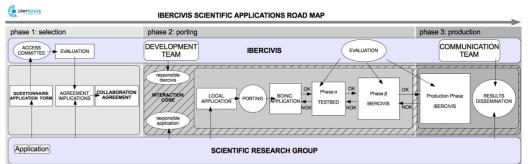
The porting of the application is carried out in partnership between the research group and Ibercivis staff. A professional team will follow the computations throughout the whole process, with the guarantee to solve any problem that may arise. We have a distributed infrastructure ensuring high availability.

And thanks to the volunteers who participate by connecting their home computer, Ibercivis platform is configured if you belong to a research group with an application that you think may be carried out in Ibercivis, do not hesitate to contact us at info@ibercivis.es.



DO YOU WANT TO CARRY OUT A LARGE-SCALE EXPERIMENT?

It is now possible thanks to crowdsourcing and collaboration used as a generator of great ideas and projects. Internet has opened the door to a wide range of applications, services, training resources and platforms that can connect to other users and professionals



9 **6** 0 8

EXPERIMENTS

ACTIVE

COMPLETED

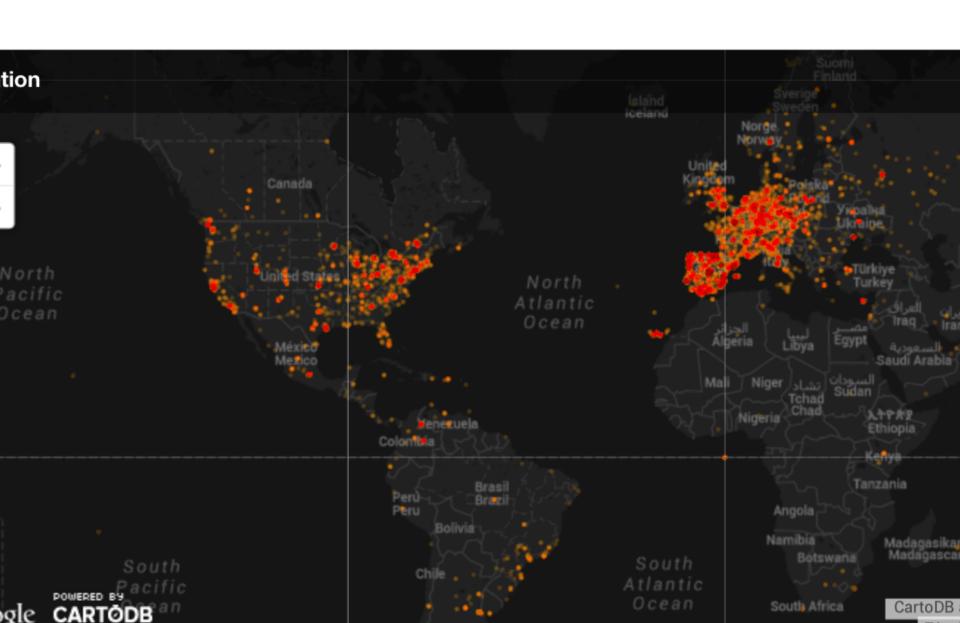
LAUNCH YOUR EXPERIMENT

PUBLICATIONS

VOLUNTEERS TEACHING DISSEMINATION ABOUT US DONATION

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THANKS

fermin@bifi.es @ferminserrano

Better society
Empowered citizens
Enhanced research

Citizen Science
Open digital science
Citizen observatories
Responsible research and innovation
Global systems science
Collective awareness platforms
Science 2.0
Digital social platforms
Virtual Research environments
Smart citizens
Reflective societies
Knowledge sharing platform
Creative Europe
Crowdfunding

. . .



Citizen Science

general public engagement in scientific research where citizens actively contribute to science either with their intellectual effort or surrounding knowledge, or with their tools or resources.

DEMOCRACY

GLOBAL CHALLENGES

ENHANCEMENT

POLICY

SCIENCE

INNOVATION

OPENNESS

CO-CREATION

LEARNING

INFRASTRUCTURES

SOCIETY

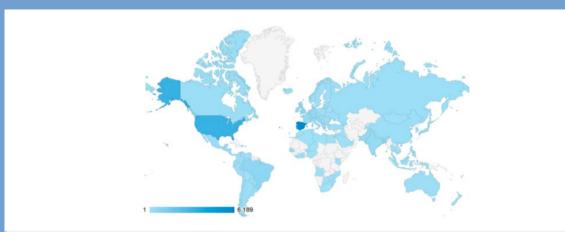
ICT

PARTICIPATION

EMPOWERMENT

PARADIGM SHIFT

www.socientize.eu Website sessions



| Country / Territory | Sessions ? | Pages / Session ? | Avg. Session Duration | % New Sessions ? | Bounce Rate ? |
|-----------------------|--|--------------------------------|--|---|------------------------------------|
| | 21,250 % of Total: 100.00% (21,250) | 3.45 Site Avg: 3.45 (0.00%) | 00:03:52 Site Avg: 00:03:52 (0.00%) | 68.15% Site Avg: 68.06% (0.13%) | 40.97% Site Avg: 40.97% (0.00%) |
| 1. Spain | 6,189 (29.12%) | 4.56 | 00:05:27 | 52.32% | 31.49% |
| 2. Portugal | 4,596 (21.63%) | 3.80 | 00:04:34 | 63.62% | 37.77% |
| 3. Substituted States | 3,307 (15.56%) | 2.32 | 00:01:54 | 94.89% | 35.62% |
| 4. Sis United Kingdom | 624 (2.94%) | 3.03 | 00:02:58 | 70.19% | 45.99% |
| 5. S Brazil | 584 (2.75%) | 2.14 | 00:02:18 | 73.63% | 62.84% |
| 6. Germany | 504 (2.37%) | 3.02 | 00:02:59 | 66.67% | 54.17% |
| 7. Austria | 474 (2.23%) | 3.67 | 00:05:34 | 35.02% | 34.81% |
| 8. Belgium | 365 (1.72%) | 3.18 | 00:03:21 | 62.47% | 38.36% |
| 9. France | 363 (1.71%) | 2.39 | 00:01:48 | 76.31% | 64.19% |
| 10. II Italy | 307 (1.44%) | 3.16 | 00:03:39 | 81.11% | 46.25% |

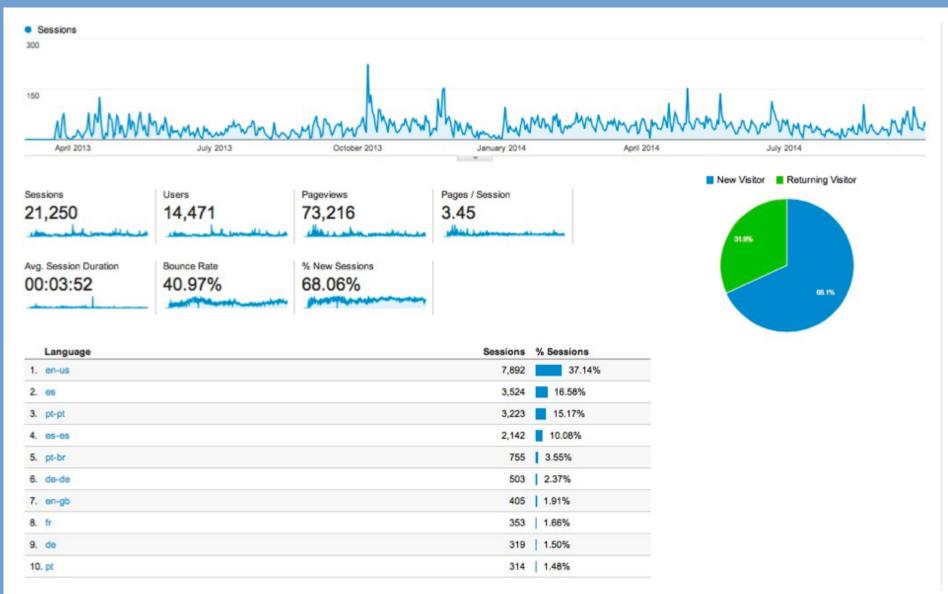


Figure 10. Number of visitors to website http://www.socientize.eu between March 1, 2013 and September 30, 2014.