

Fundación Ibercivis

www.ibercivis.es

Somos

Iniciativa Española y Portuguesa

Entidades Públicas y de Investigación

ES: MINECO, UNIZAR, CSIC, CIEMAT, Red.es, FZCC, DGA, I2Basque

PT: UMIC, CNC-UC, FCCN, Ciencia Viva; AR: UBA; BR: UFCG

Hacemos

Investigación, promoción, integración, apoyo

de iniciativas participación ciudadana e interacción en la ciencia

expertos, herramientas, conocimiento, network

Tenemos

grupos trabajo: desarrollo, sysadmin, investigación, gestión, comunicación

36.000 voluntarios en total, 4.000 activos

16 grupos investigación usuarios en total, 6 activos

Ofrecemos

A VOLUNTARIOS

participación útil y abierta

comunidad

aprendizaje avanzado

A INVESTIGADORES

recursos útiles, facilidad, cercanía

nuevas fuentes de datos

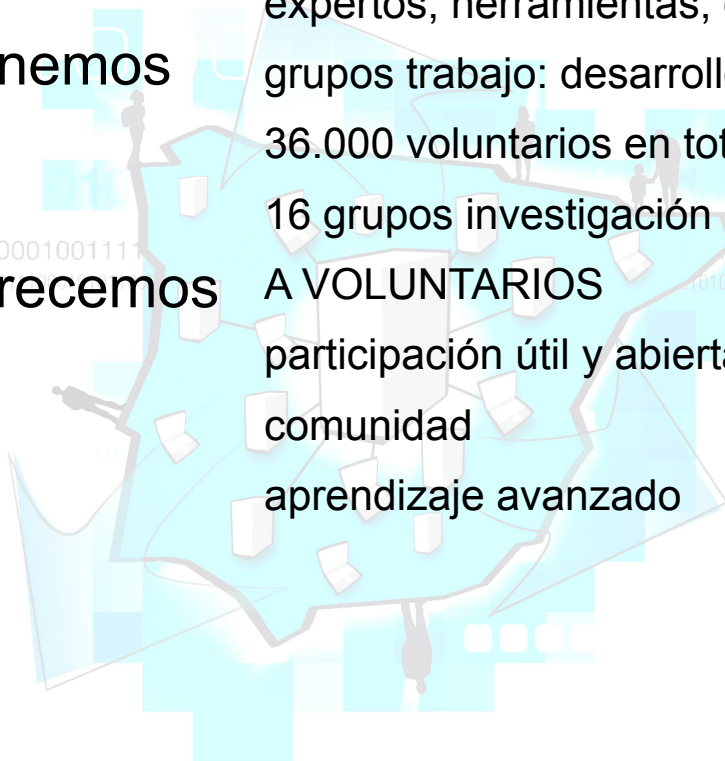
altavoz de divulgación

A DOCENTES

recursos

tecnologías

visitas



Proyecto Socientize Society as e-Infrastructure



socientize
citizen science projects



Univ. Zaragoza, Tecnara (ES),

Univ. Coimbra, Museu Ciencia Coimbra (PT)

Univ.Fed. Campina Grande (BR)

Zentrum fur Soziale Innovation (AU)

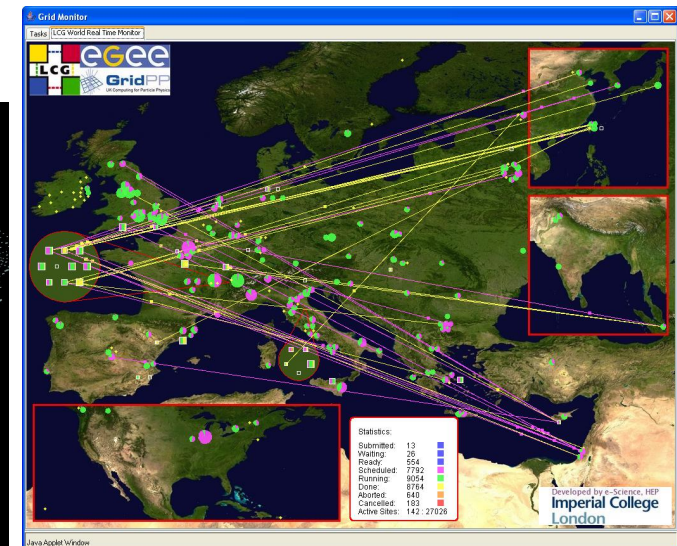
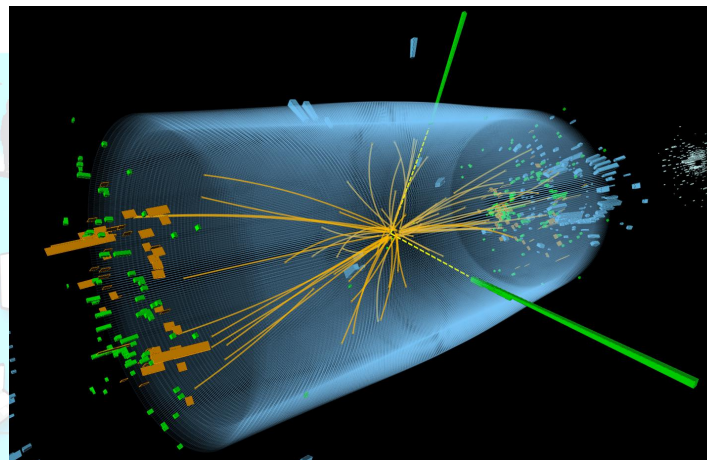
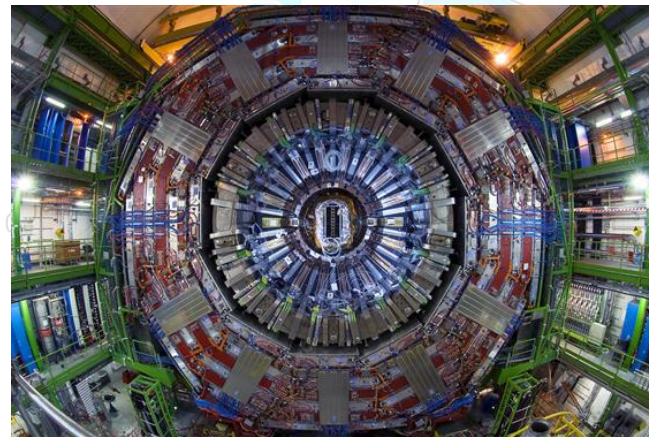
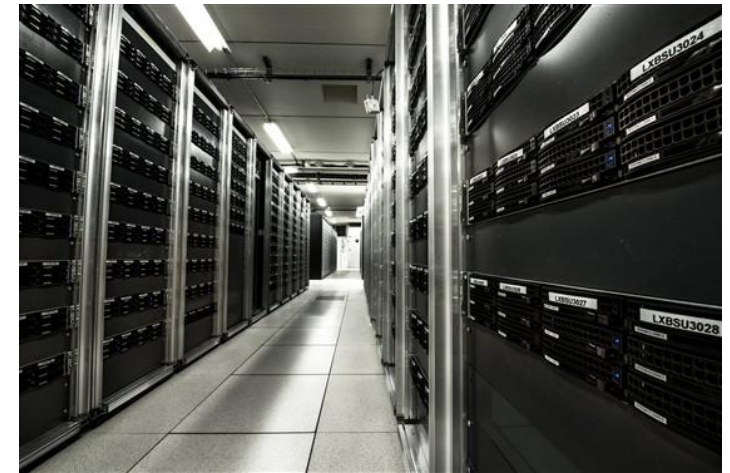
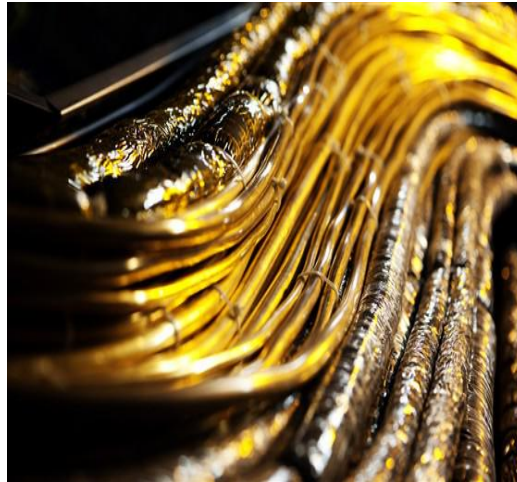
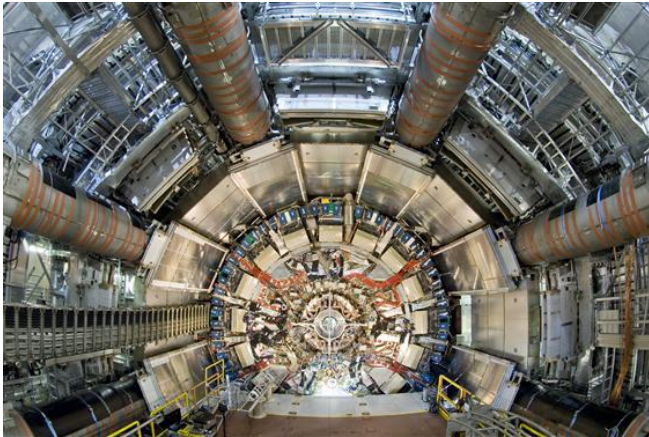
External Advisory Board: David Anderson (BOINC -
US), Drew Hemment (FutureEverything - UK) y
Steven Bamford (Zooniverse - UK)

FP7 CSA Oct 2012 – Sept 2014
700.000€

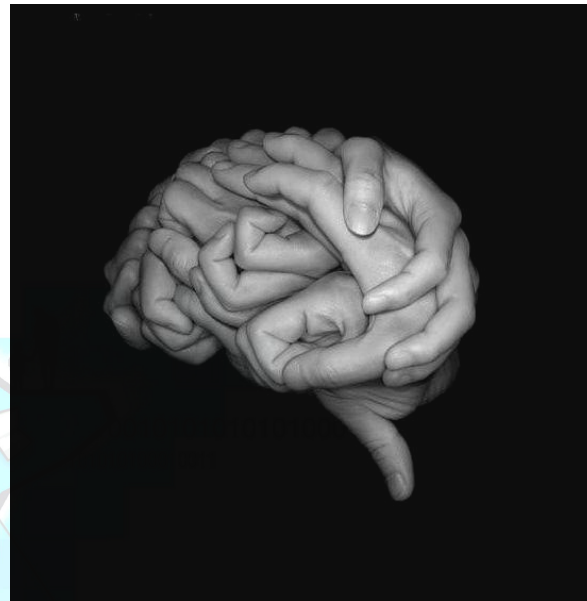
Libro Blanco Ciencia Ciudadana



e-ciencia



La sociedad (digital) es una
herramienta / infraestructura



que se debe aprovechar e investigar



Enzo Marinari, Univ. La Sapienza

From past to future (and back): a few ideas about supercomputing

Supercomputing is for special, very heavy needs, but also a way to progress, and change our way of thinking. This must be possible, since supercomputing of tomorrow will be so much more and so much power than supercomputing of today.

Can we get intellectual revolutions again, with supercomputing?

Let me summarize my point.

Are we able to give to students and to people starting their research with us the idea that “supercomputer” tools can change their approach to scientific questions?

Can we have (and do we need to have) our beginning student thinking to a new problem moving very fast to the use of large computer resources and being able to see the problem in a different way because of it? And maybe to find new perspectives?

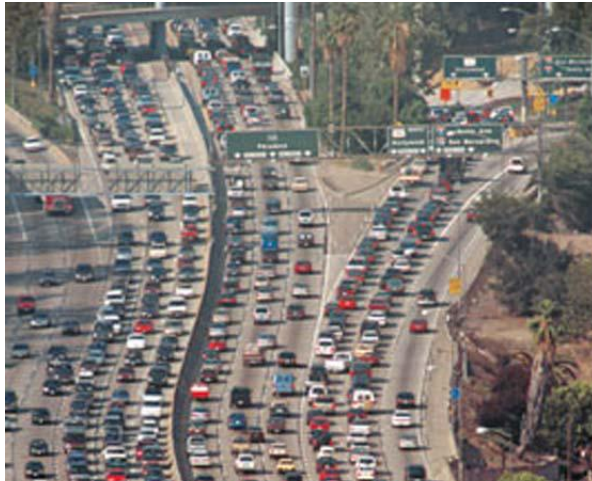
Metáfora



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Metáfora



Investigadores

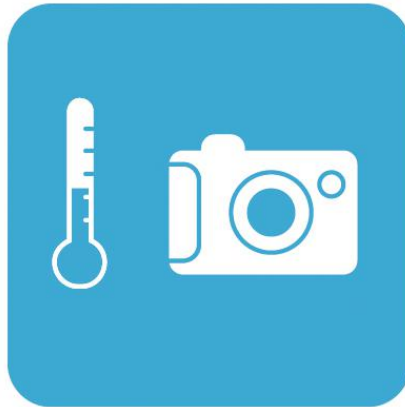


Sociedad



Ciencia ciudadana

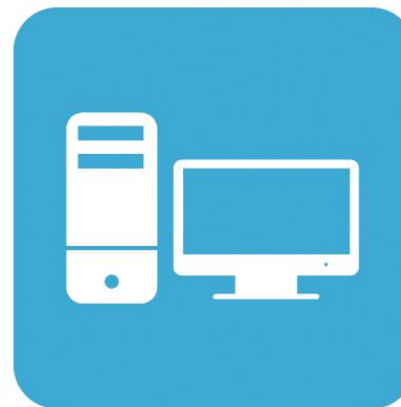
Realizada con participantes no profesionales que aportan valor, realizando parte del trabajo científico o aportando parte de los recursos necesarios



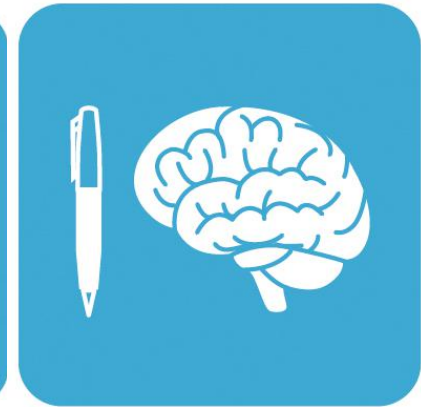
RED DE SENSORES



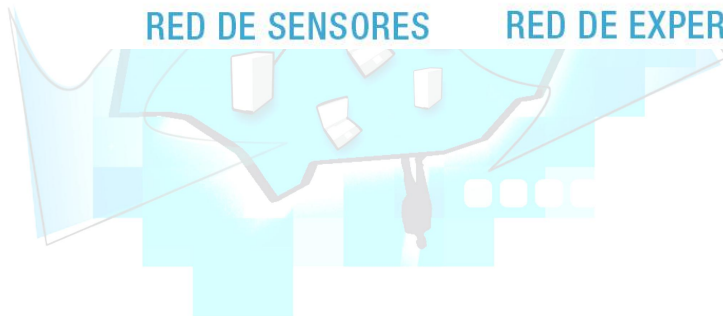
RED DE EXPERIMENTACIÓN



RED DE ORDENADORES

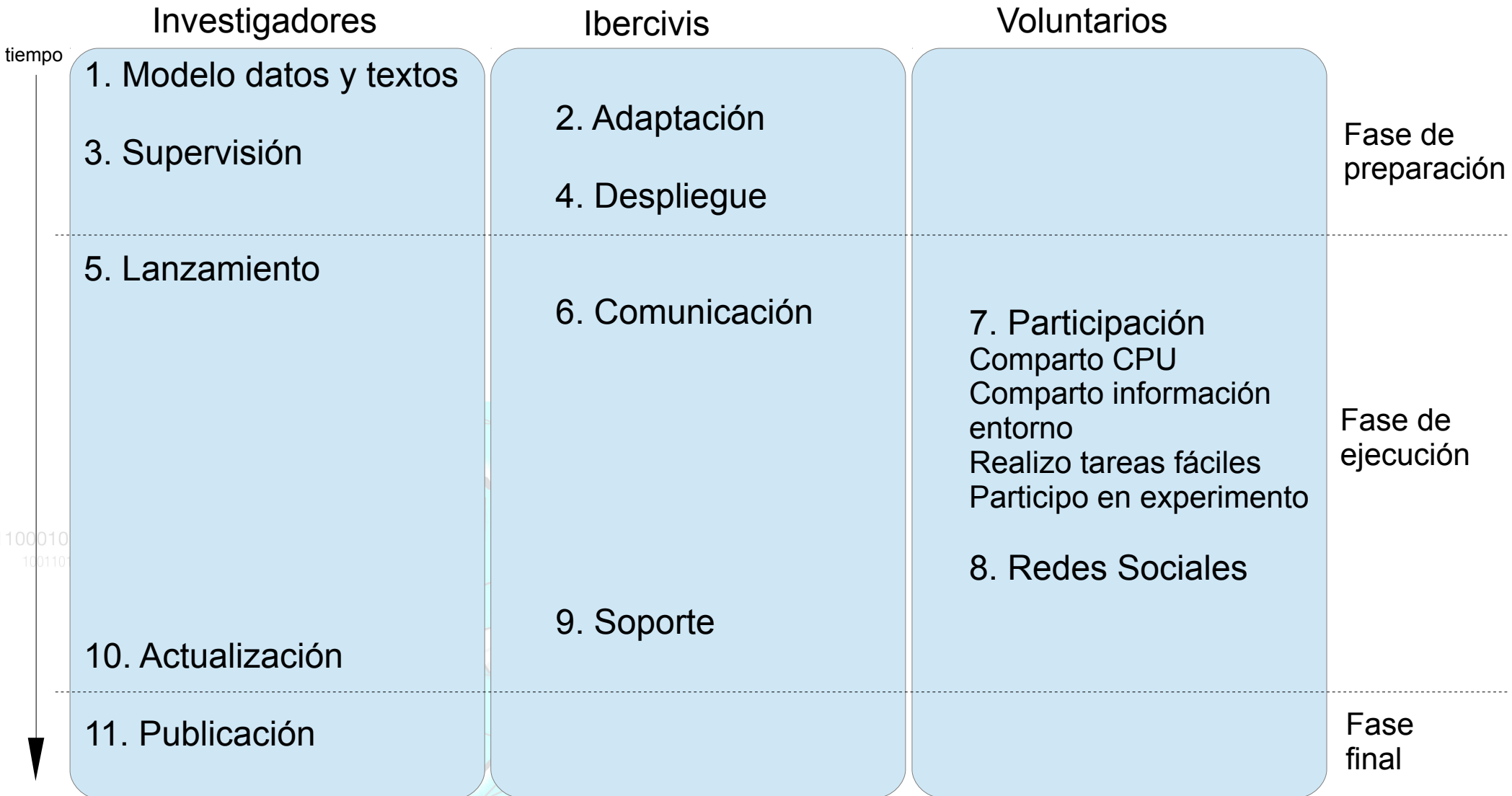


RED DE TALENTO



10001010110000100
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Cronograma de un experimento



Open Source Resources

Volunteer computing BOINC, XTREMWEB, OURGRID

Volunteer sensing EpiCollect, Ushahidi, Epiwork

Volunteer thinking PyBossa, Furnivall



OurGrid



Ibercivis BOINC

No comunicación entre clientes, solo con servidor

No licencias

Ratios I/O recursos ejecución (ancho banda, RAM, disco...)

Porting o wrapper o virtualización

Validación

Checkpointing

Nº de horas

Interés científico

Feedback

Móviles y almacenamiento

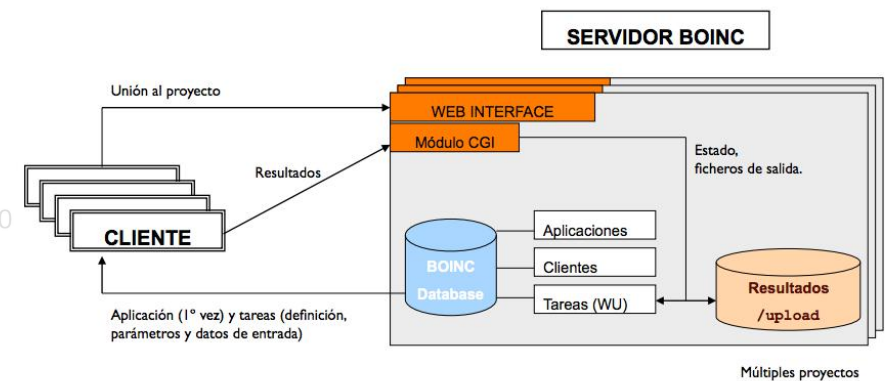
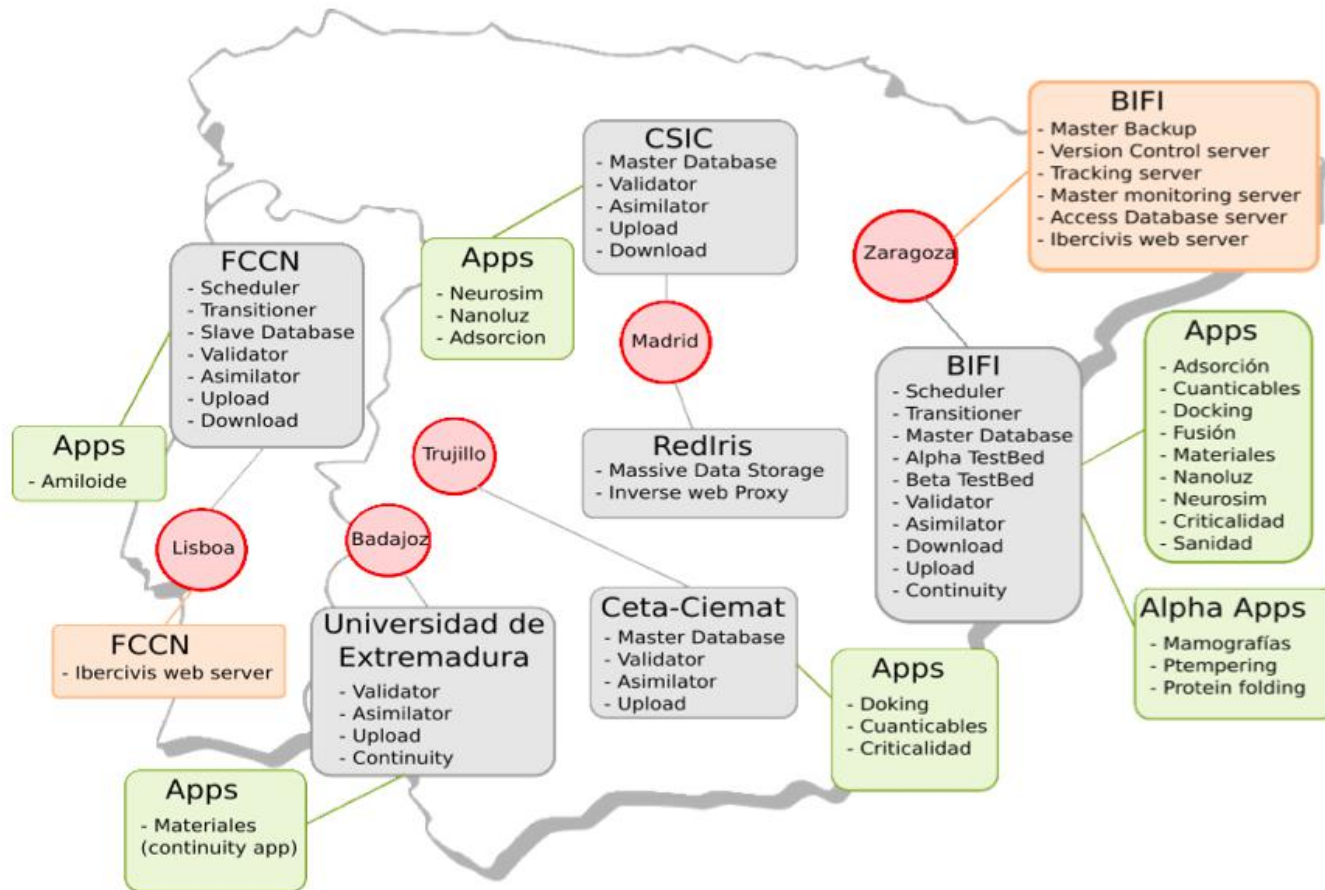


Imagen: CETA CIEMAT

BOINC



Shell:

Icivis_status_job

Icivis_send_job

Icivis_queue_status

Icivis_erase_job

Icivis_profile

Total: 15 aplicaciones, 37.000 voluntarios, 7 TeraFLOPS
Ahora: 2 aplicaciones, 2.000 voluntarios (3.000 hosts), 2,2 TeraFLOPS

International Dekstop Grid Federation, EGI@home, repositorio apps

Sensores ciudadanos

LIGA ENERGÉTICA
Edificio I+D+i UZ

20%







feelicity.es

IACS Instituto Aragonés de Ciencias de la Salud



Tus momentos más preciados en Feelicity

Tu ciudad está llena de rincones que esconden momentos felices de tu vida. Empieza hoy mismo a coleccionarlos y compartirlos. Construiremos juntos un mapa distinto, daremos vida a una nueva ciudad **Feelicity**

Y cuando viajes ayuda a cambiar el mapa de otras ciudades...

REGISTRARSE

Buscar momentos felices **Buscar** **Geoposicióname**

Mapa con la distribución geográfica de los usuarios registrados en GripeNet.es.



GripeNet.es

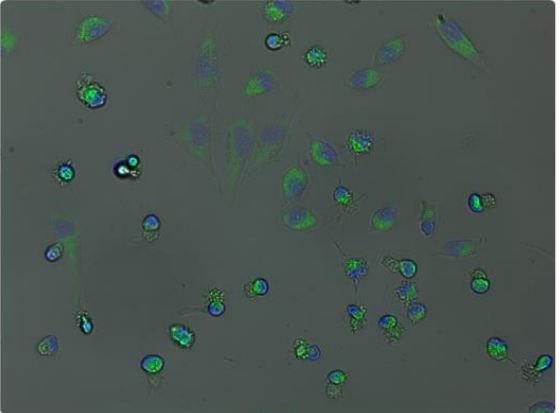
EPIWORK



Analizando imágenes

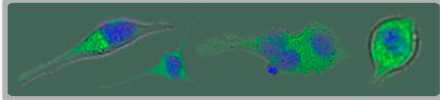
How many live cells do you see?

Channels Normal Blue Green



How many live cells are there? And dead? The cells in the first sample image are alive, while the ones in the below image are dead.

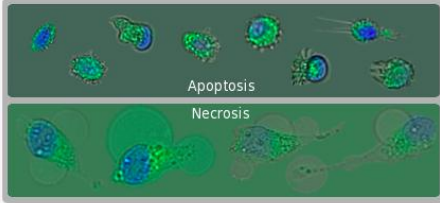
Example of live cells



Example of dead cells

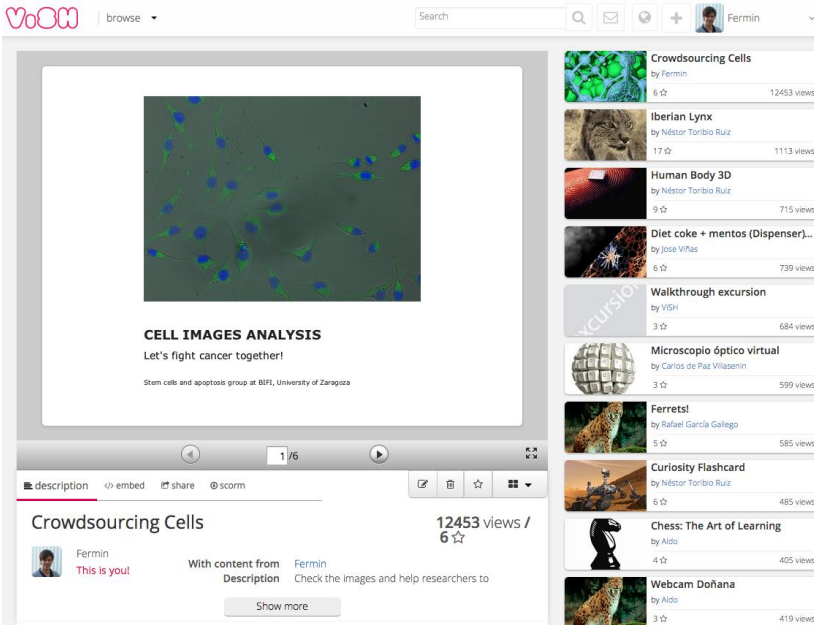
Apoptosis

Necrosis



Alive Dead

Not sure



Voorn | browse

Search

CELL IMAGES ANALYSIS
Let's fight cancer together!

Stem cells and apoptosis group at BIF, University of Zaragoza

12453 views / 6 stars

Crowdsourcing Cells
by Fermin

Iberian Lynx
by Néstor Toribio Ruiz

Human Body 3D
by Néstor Toribio Ruiz

Diet coke + mentos (Dispenser)...
by Jose Viñas

Walkthrough excursion
by VIGH

Microscopio óptico virtual
by Carlos de Paz Vilasemin

Ferrets!
by Rafael García Gallego

Curiosity Flashcard
by Néstor Toribio Ruiz

Chess: The Art of Learning
by Aldo

Webcam Doñana
by Aldo



Alive Cells | Cell Shape | Cell Content Release | Nucleus Shape | Mitochondria Shape | Mitochondria Distribution | Nucleus Mobility | Cell Mobility | Remarks

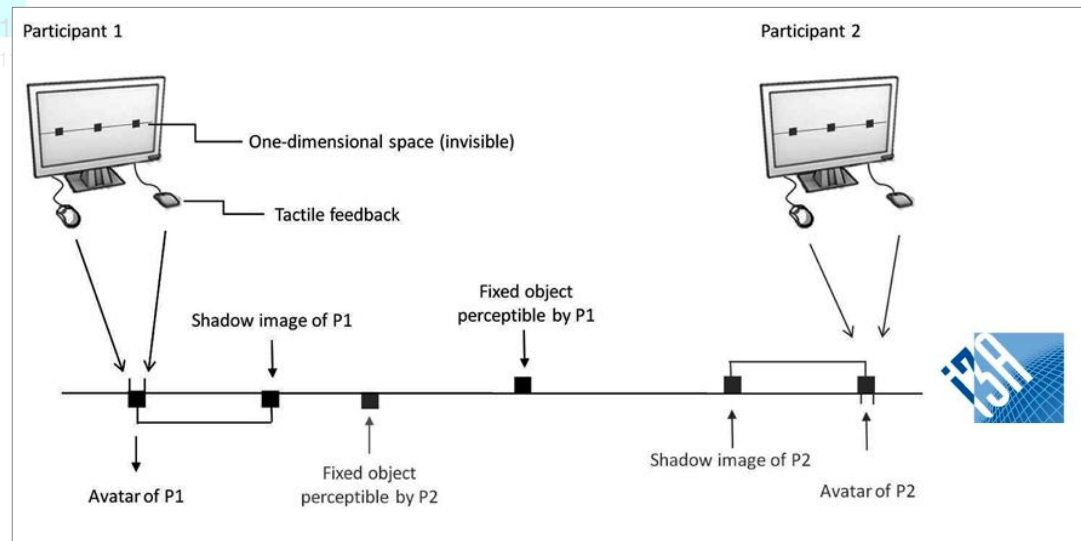
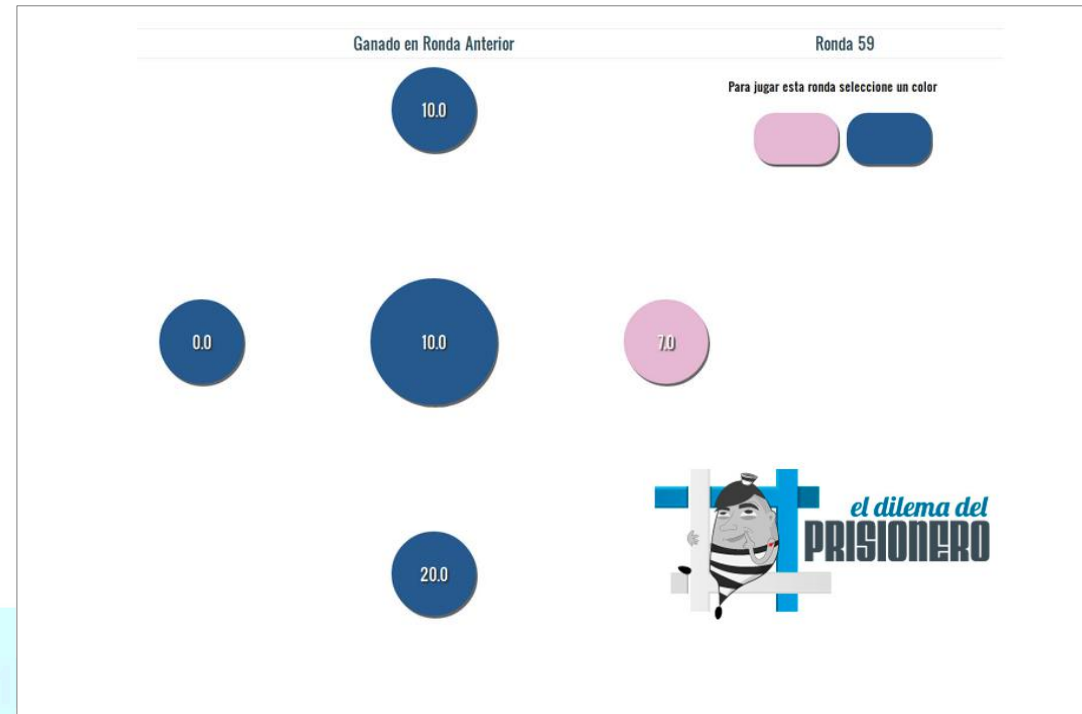
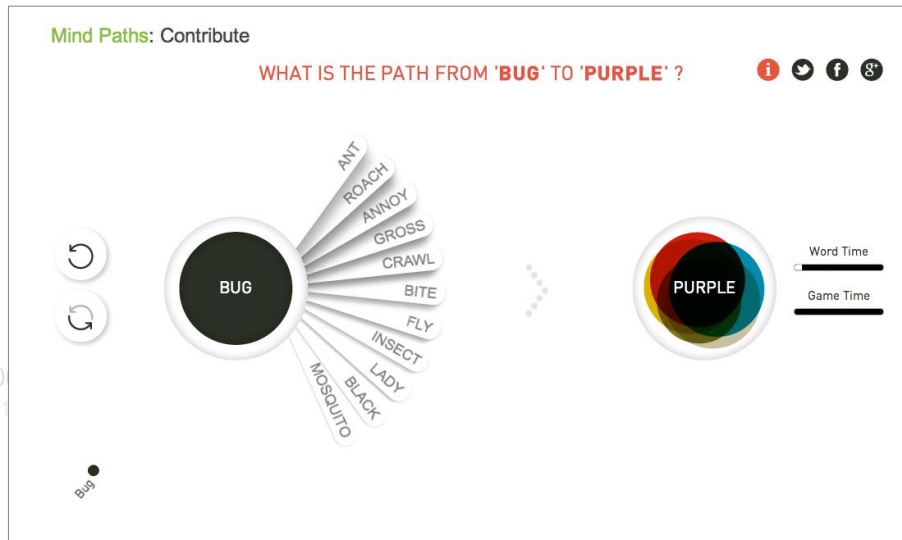
Powered by



PyBossa
OPEN-CROWD-SOURCING

Participando en experimentos

- Co-crear
- Reclutar
- Formación necesaria
- Gamificación
- **Crear comunidad, incentivos, reconocimiento**



GRACIAS!

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<http://bifi.unizar.es/en/research/computation/citizen-science>

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