Crowdsourcing and AI
CUI, spring 2022
Lecture 1

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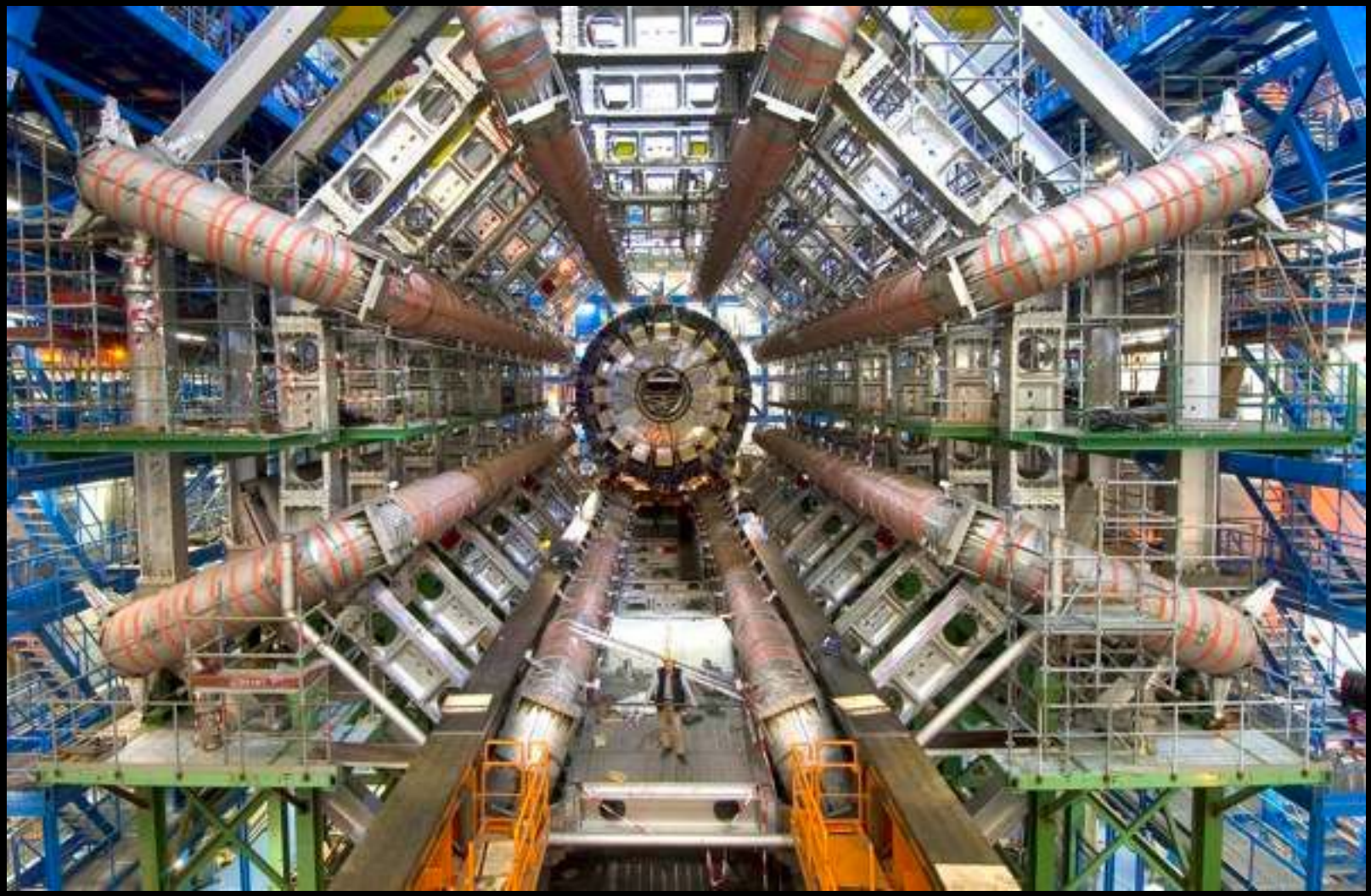
UNIGE + UNITAR + CERN

Prologue

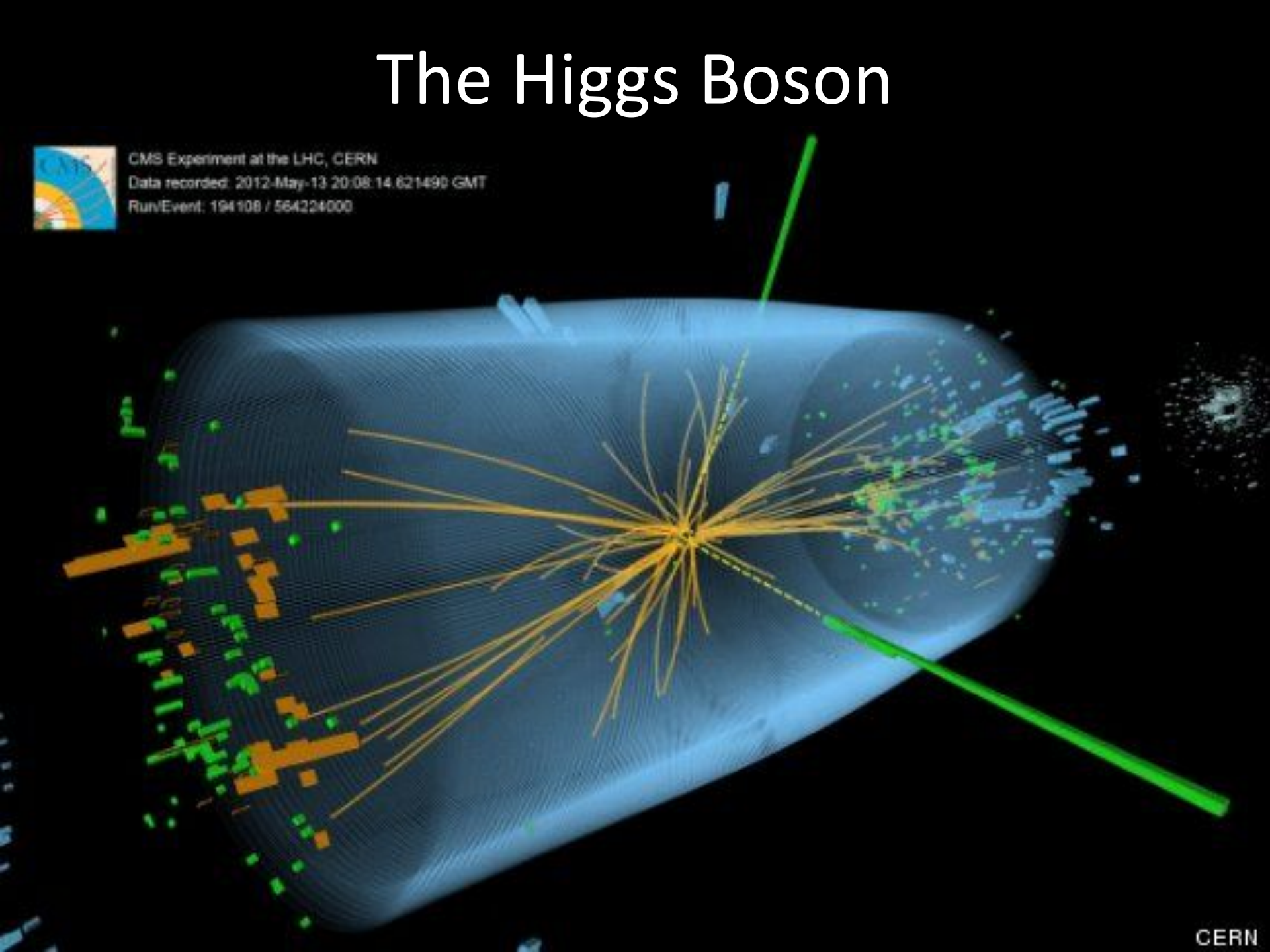
Lecturer Background

CERN

The ATLAS Detector



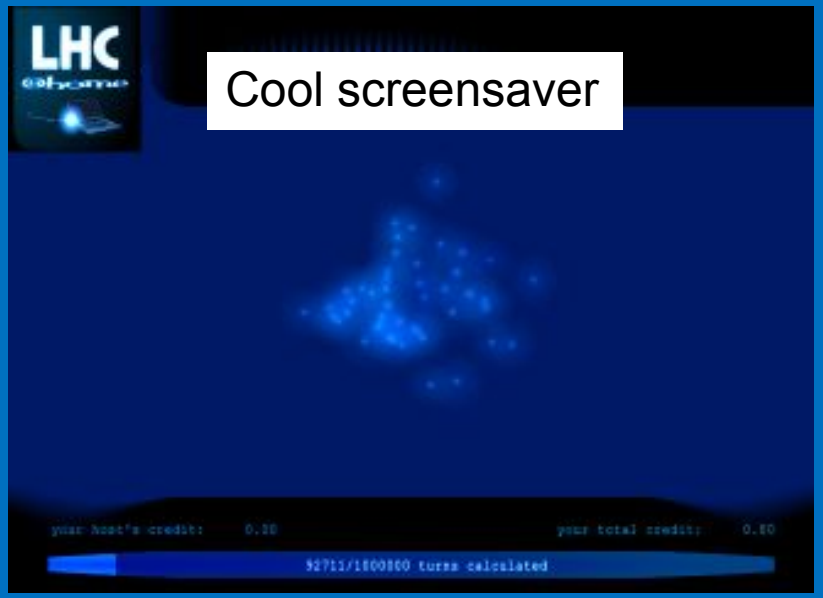
The Higgs Boson

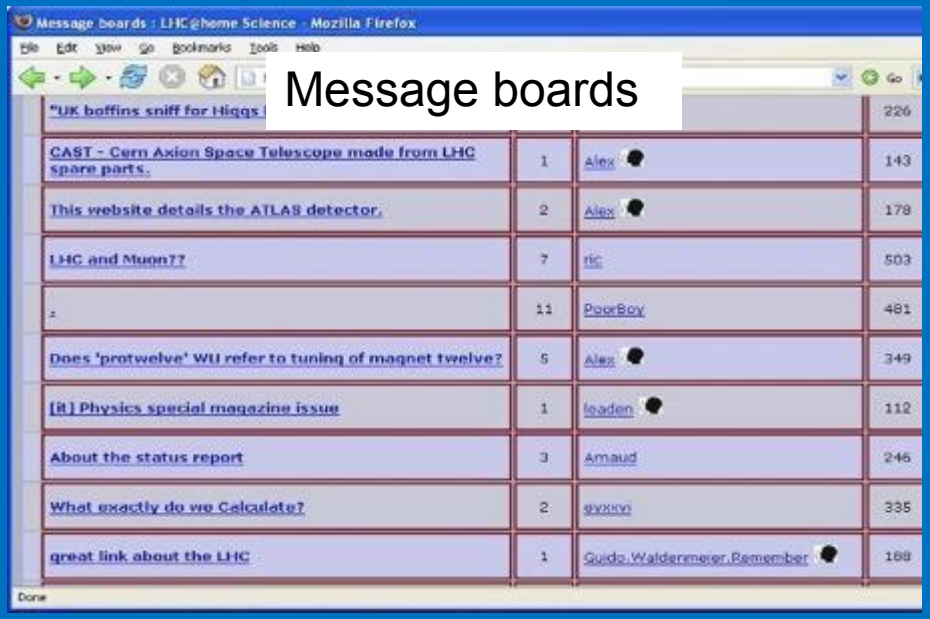


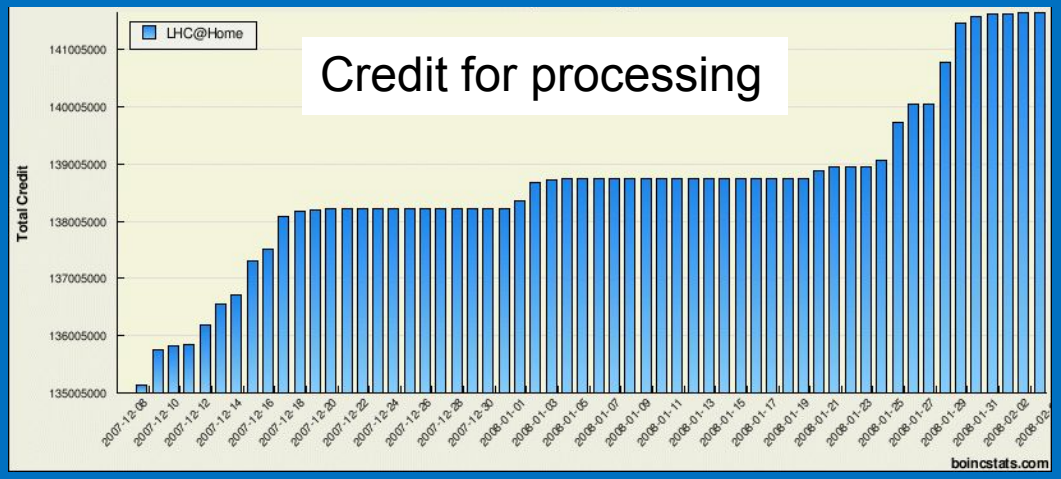
1999: SETI@home

2004: LHC@home “Sixtrack” built on BOINC

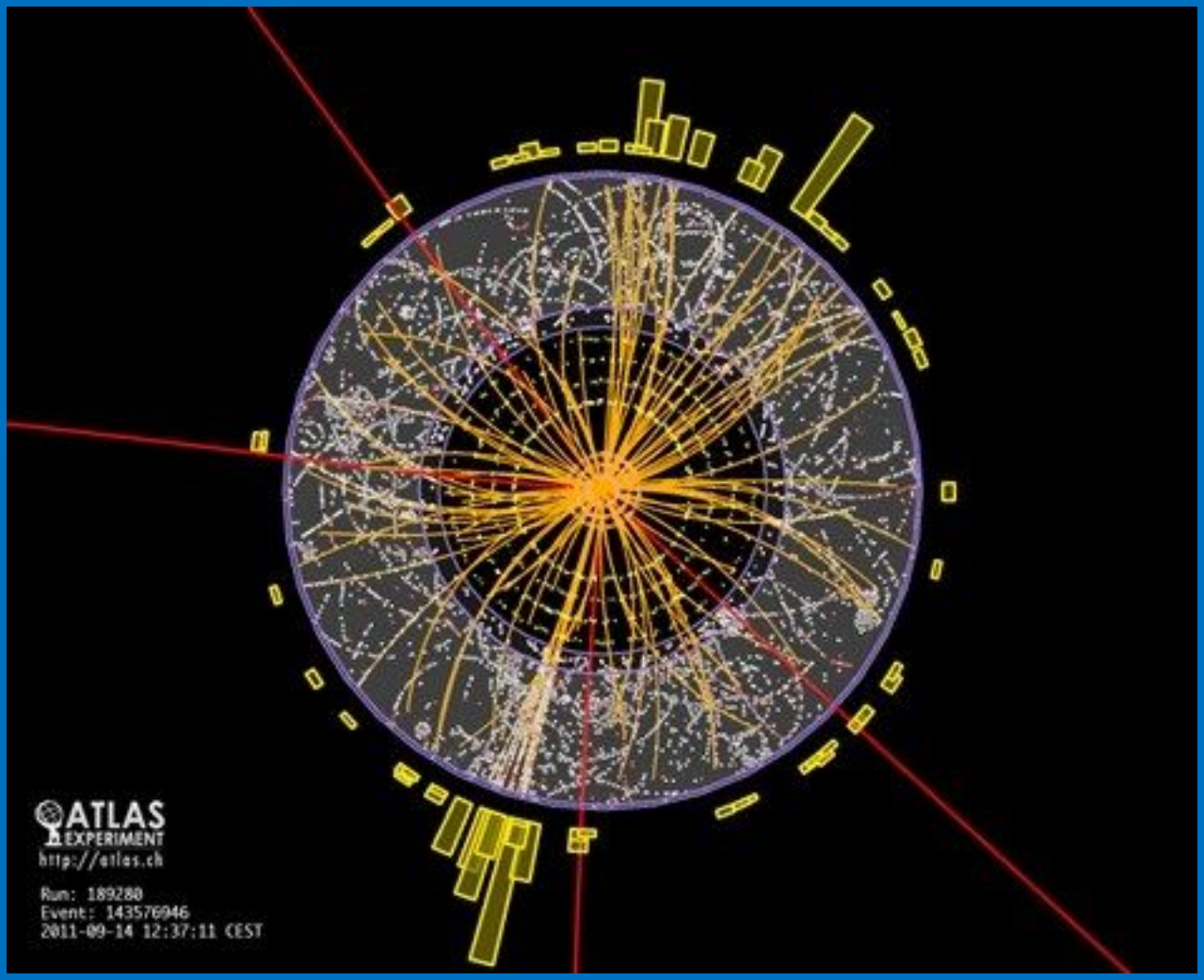
Why did volunteers participate?







2011: LHC@home “Test4Theory”



Comment by a volunteer

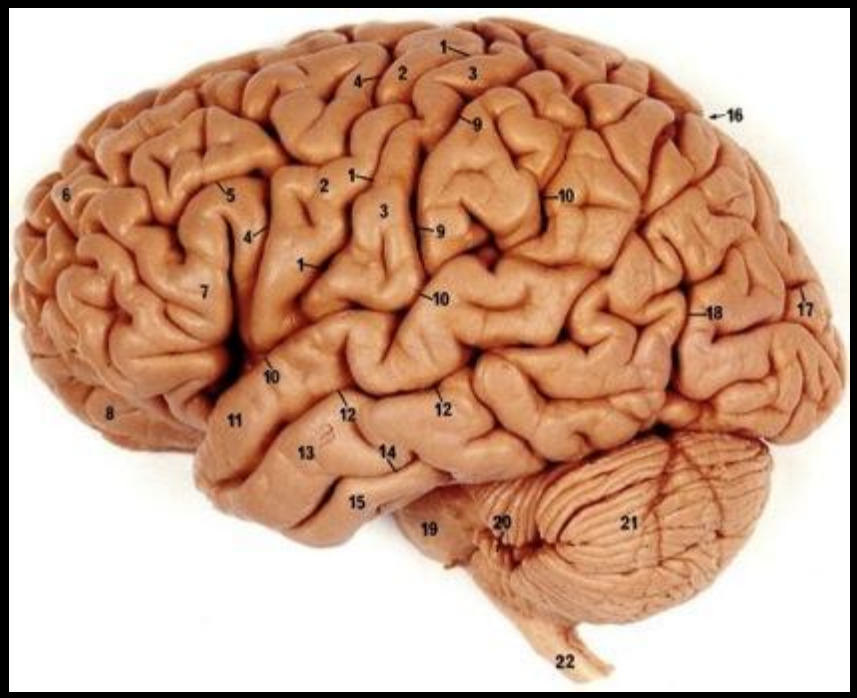
Thanks for this extremely interesting thread!

I am new to T4T and BOINC and I really appreciate the learning potential of such projects. However, from my perspective what is the most motivating aspect of T4T is that it allows non-experts to contribute to high-level science project like testing the Standard Model. It is amazing how it allows the public to become actively involved in the research and become a part of scientific community.

Technological Context

Crowdsourcing for Science

The largest scientific resource on the planet?



2bn

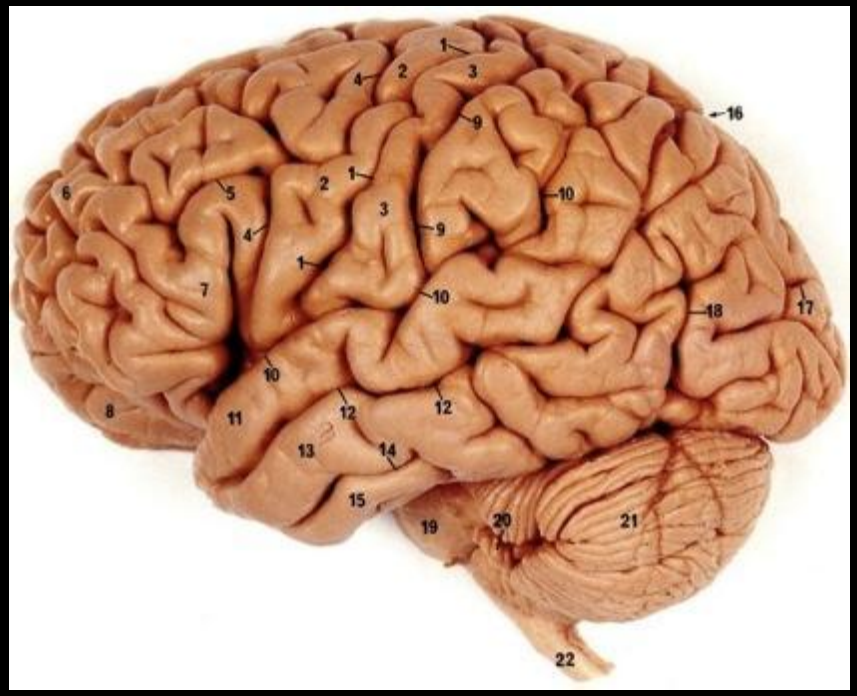
5bn

7bn

Crowdsourcing for Science:
A range of approaches

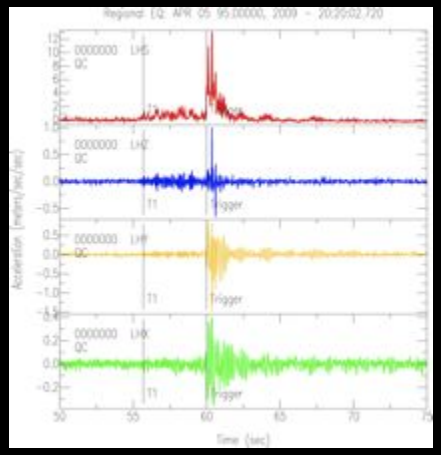
Volunteer Computing

Volunteer Sensing



Volunteer Thinking

Quake Catcher Network: volunteer seismic detection



Epicollect:
volunteer epidemiological data

GalaxyZoo:
Volunteer galaxy classification
part of Zooniverse

Foldit:
volunteer protein folding

Institutional Context

University of Geneva
UN Institute for Training and Research
European Organization for Nuclear Research

"Rethinking Public Participation"