

Research in the Cloud

How well does it work?
How will it evolve?

ICC 2013, Budapest, June 11

Welcome!

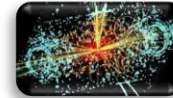
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Experiments



Simulations



Archives



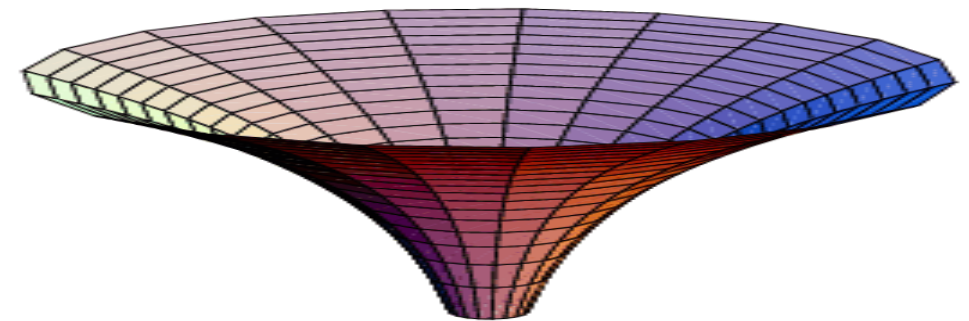
Literature



Instruments



The data explosion is transforming science...



Petabytes
Doubling & Doubling

...and leads to a fundamental change of the nature of discovery



<http://research.microsoft.com/en-us/collaboration/fourthparadigm/>

Let scientists be
scientists in this *data
rich* world ...

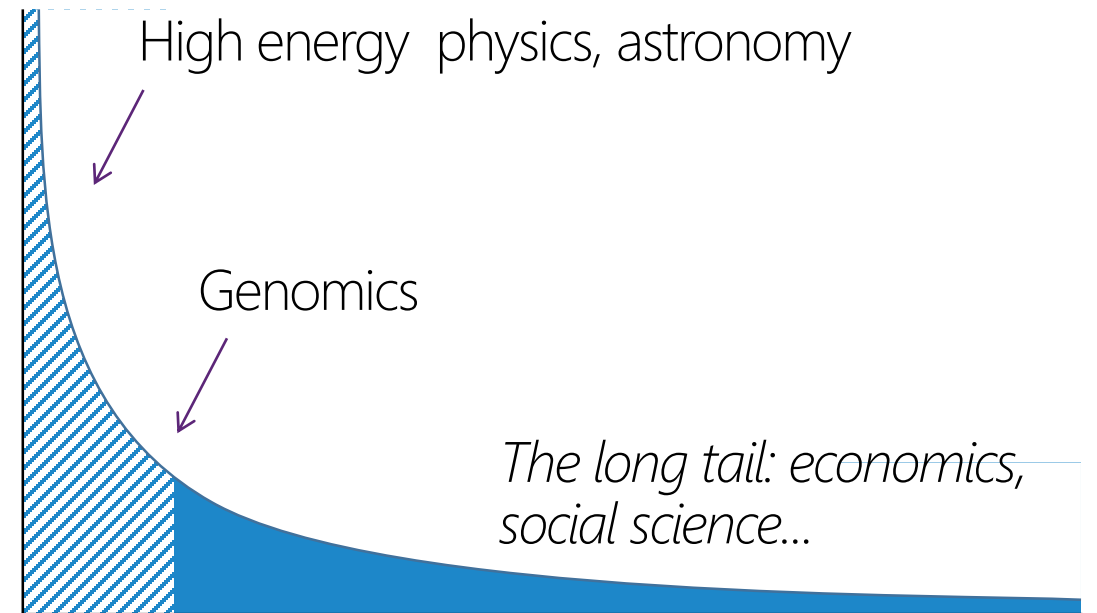
... standard tools, scalable
computation, rich visualization
and other integrated data
management services ...



The challenge:

Can we create a sustainable model for the long tail of science?

Regulation, funding mechanisms, culture, open access, security concerns...

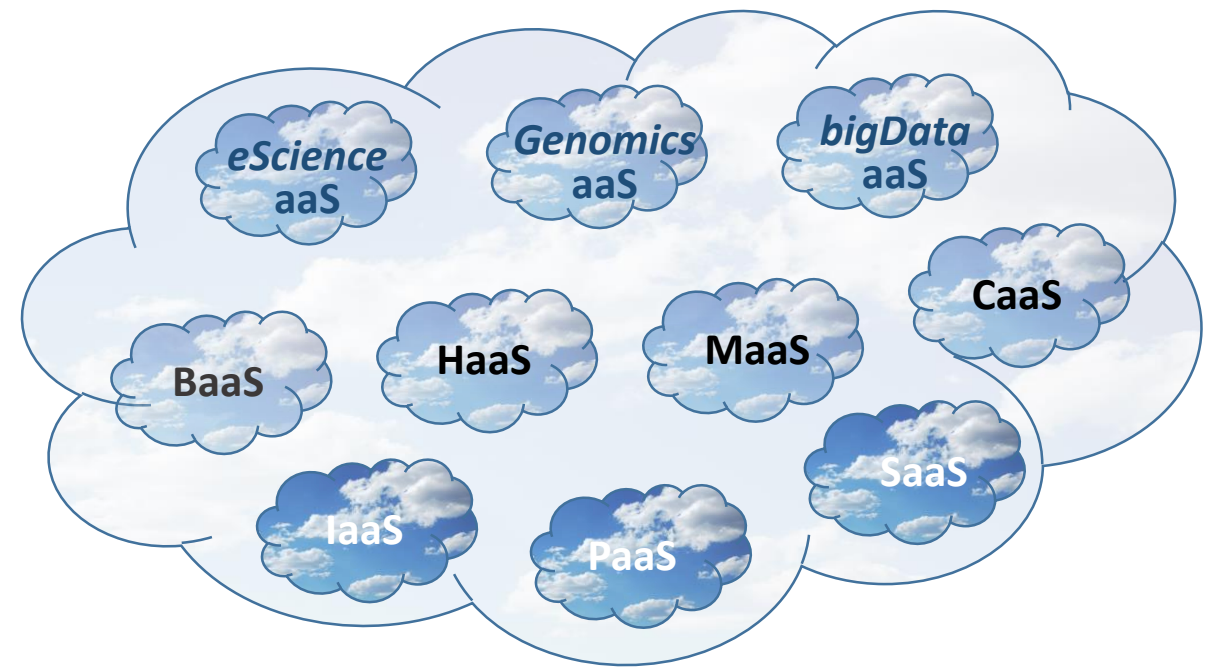


What is the role of commercial clouds? *Evolution? Limits?*

Research democratization

- *big data-sets*
- *easy-to-use, open & extensible services*

Bandwidth – compute vs. data



Interested in more information?

Visit e.g.
www.cloud4science.eu

C4S Gene Mutation Analysis Pipeline Service

Input seq.

Hg19 index

Cloud4Science - Windows Internet Explorer

http://www.cloud4science.eu/Static/About.aspx

Cloud4Science

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A BIOINFORMATICS PLATFORM FOR SCIENTIFIC DATA MANAGEMENT

Spotlight on Cloud4Science

Storing and managing datasets can be a significant challenge for scientists. Cloud4Science is a unique online

Cloud4Science - Windows Internet Explorer

http://www.cloud4science.eu/Pages/Home.aspx

Cloud4Science

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A BIOINFORMATICS PLATFORM FOR SCIENTIFIC DATA MANAGEMENT

BioInformatics

Use cases and best practices

Pipeline for Mutation analysis

Sequence mapping

Services

- SUPPORTED DATABASES
- SUPPORTED TOOLS
- WORKFLOWS
- HOW TO ACCESS
- HELP DESK

Downloads

DETAILED DOCUMENTATION

GUIDELINES AND TUTORIALS

Community

NEWS

EVENTS

What we are

Cloud4Science is committed to building a strong community open to all bioinformatics users and organisations. Cloud4Science offers specific cloud computing services to facilitate data and knowledge exchange. Overcoming the significant challenges of

What we offer

Cloud4Science is a unique online platform that allows scientists around the world to easily access high performing cloud services to run multi-discipline experiments. We offer cloud resources and a complete set of tutorials, use cases and documents to ease

Microsoft Research Cloud Research Engagement

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Thank you! Any questions?

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