



Opportunities for Data Exchange



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Opportunities for Data Exchange

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M. Wilkinson, M. Wilson



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Preservation is indispensable!



Preservation is boring!



Try saying the same things over and over again!





(Open) Access is a minefield





Re-use matters!



Riding the wave

How Europe can gain from the rising tide of scientific data

Final report of the High Level Expert Group on Scientific Data
A submission to the European Commission

October 2010

Charting the future of e-Infrastructures



The worst nightmare?



Build it and...



...they will not come!



Build infrastructures to share...
...so to enable preservation...
...and successful infrastructures



ODE: social dimension to a complex issue



Three key points in data sharing



Drivers



Barriers



Enablers





ODE asked questions and listened...



...to researchers



...to data centers



...to funding agencies and policy makers



...to libraries

Royal Society of London
PHILOSOPHICAL
TRANSACTIONS:
GIVING SOME
ACCOMPT
OF THE PRESENT
Undertakings, Studies, and Labours
OF THE
INGENIOUS
IN MANY
CONSIDERABLE PARTS
OF THE
WORLD.

Vol I.

For Anno 1665, and 1666.

In the SAVOY,
Printed by T. N. for John Martyn at the Bell, a little with-
out Temple-Bar, and James Allestry in Duck-Lane,
Printers to the Royal Society.

...to publishers



Some spoilers

APA Conference 2012 Programme

Wednesday 7th November

09:00 – 11:00 **ODE PROJECT, Lessons Learnt**
Researchers and Funders: Tales of Challenges and Change
Dr Hans Pfeiffenberger, HA
The Library's Evolving Role in Scholarly Communications
Dr Susan Reilly, LIBER
Data and Publications, how to make things better
Drs Eefke Smit, STM
Data Centres and Data Sharing
Dr Simon Lambert, STFC

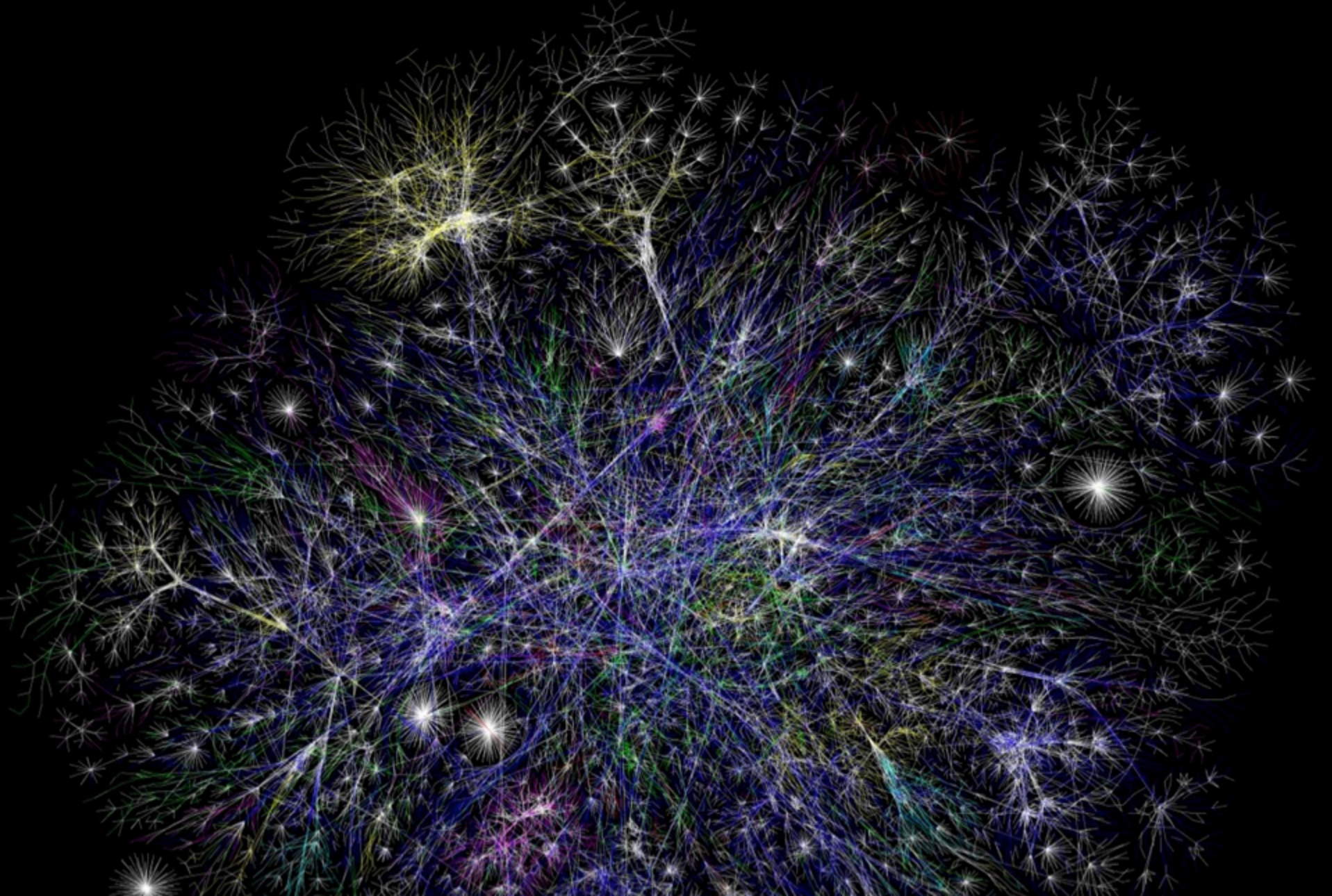
11:00 – 11:30 Coffee Break

11:30 – 13:00 **ODE: Behind the Scenes and How It Affects You (Parallel Session)**



Trailer and not spoilers: come tomorrow!





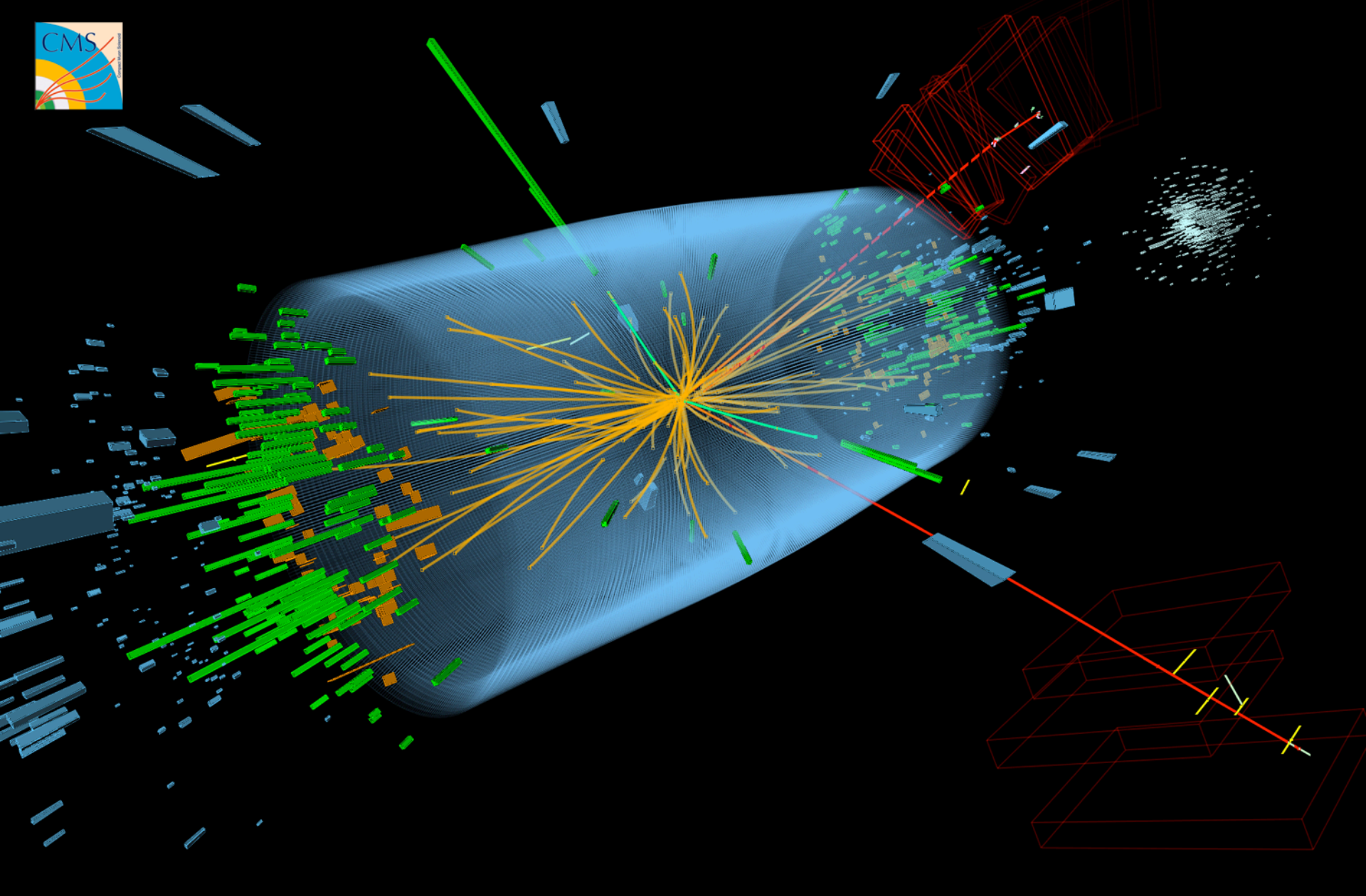
Complex network



Keeping it simple



Start from the researchers



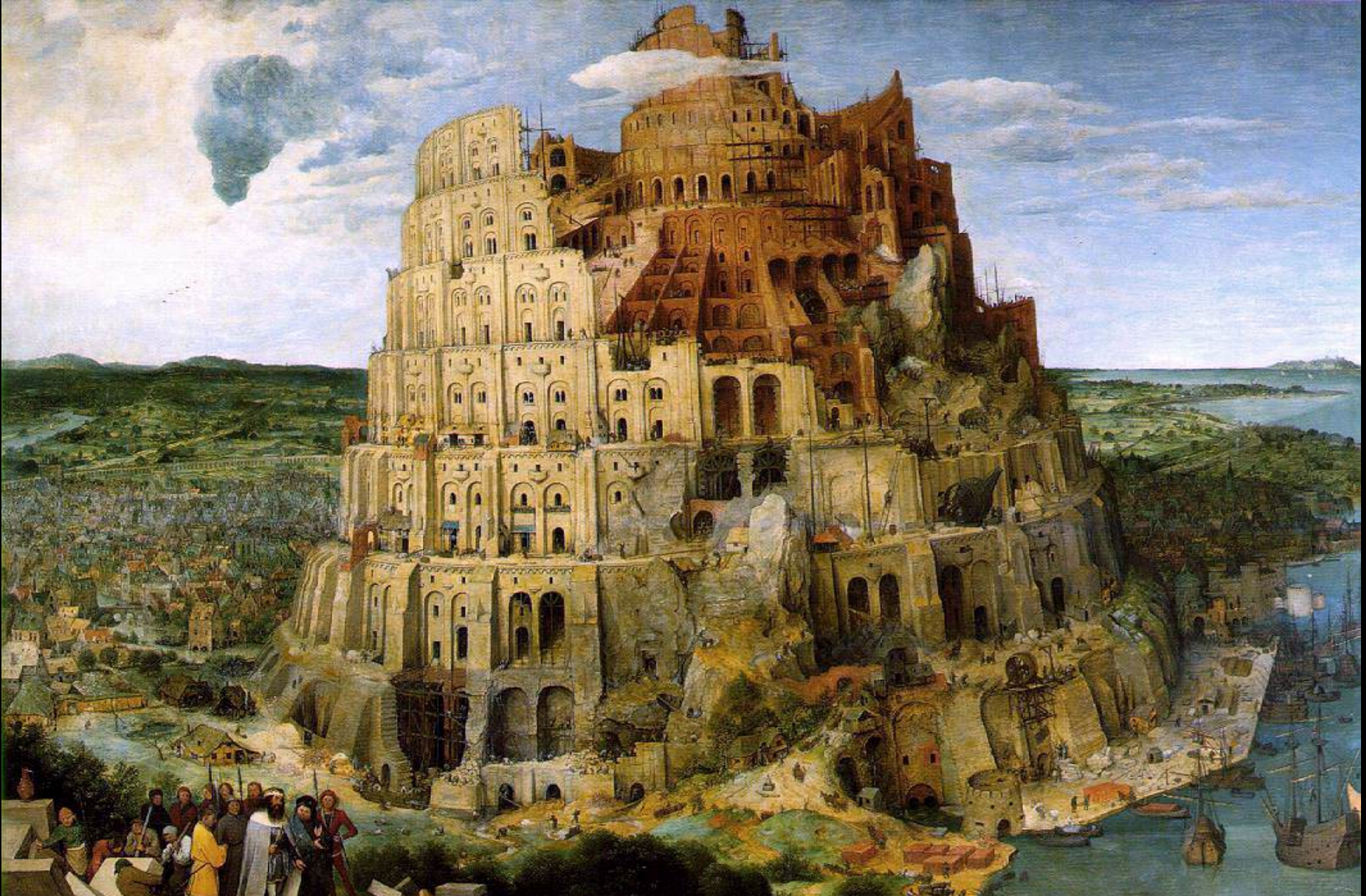
Big Data



Long tail



Connected: space, time, virtual environments



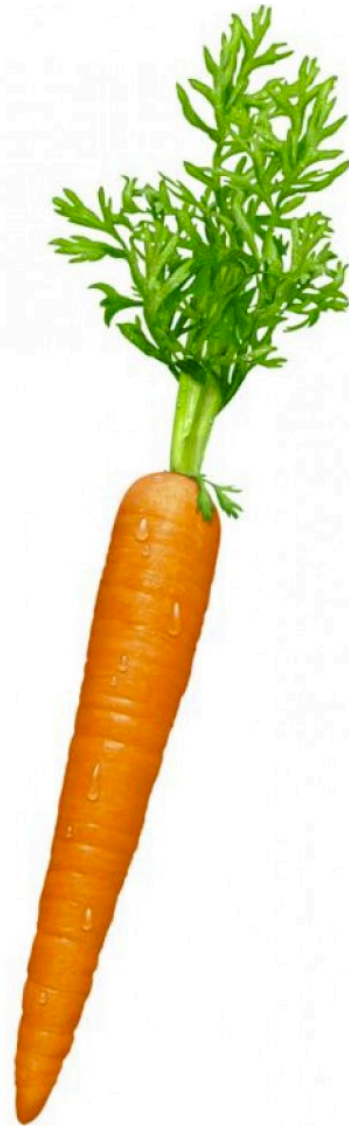
Drive to contribute to the “edifice of science”



Hard work... (also when it comes to share)



Need a bit of help



The right incentives



One-size-fits-all obligations...



...can have unintended consequences.

<concrete example>



What makes scientists happy?



Recognition

ticle. The expected local significance for a standard model Higgs boson of that mass is 5.8σ . The global p -value in the search range of 115–130 (110–145) GeV corresponds to 4.6σ (4.5σ). The excess is most significant in the two decay modes with the best mass resolution, $\gamma\gamma$ and ZZ , and a fit to these signals gives a mass of $125.3 \pm 0.4(\text{stat.}) \pm 0.5(\text{syst.})$ GeV. The decay to two photons indicates that the new particle is a boson with spin different from one. The results presented here are consistent, within uncertainties, with expectations for the standard model Higgs boson. The collection of further data will enable a more rigorous test of this conclusion and an investigation of whether the properties of the new particle imply physics beyond the standard model.

Acknowledgements

We congratulate our colleagues in the CERN accelerator departments for the excellent performance of the LHC machine. We thank the computing centres in the Worldwide LHC computing Grid for the provisioning and excellent performance of computing infrastructure essential to our analyses. We gratefully acknowledge the contributions of the technical staff at CERN and other CMS institutes. We also thank the administrative staff at CERN and the other CMS institutes and acknowledge support from BMWF and FWF (Austria); FNRS and FWO (Belgium); CNPq, CAPES, FAPERJ, and FAPESP (Brazil); MES (Bulgaria); CERN; CAS, MoST, and NSFC (China); COLCIENCIAS (Colombia); MSES (Croatia); RPF (Cyprus); MEYS (Czech Republic); MoER, SF0690030s09 and ERDF (Estonia); Academy of Finland, MEC, and HIP (Finland); CEA and CNRS/IN2P3 (France); BMBF, DFG, and HGF (Germany); GSRT (Greece); OTKA and NKTH (Hungary); DAE and DST (India); IPM (Iran); SFI (Ireland); INFN (Italy); NRF and WCU (Republic of Korea); LAS (Lithuania); CINVESTAV, CONACYT, SEP, and UASLP-FAI (Mexico); MSI (New Zealand); PAEC (Pakistan); MSHE and NSC (Poland); FCT (Portugal); JINR (Armenia, Belarus, Georgia, Ukraine, Uzbekistan); MON, RosAtom, RAS and RFBR (Russia); MSTD (Serbia); SEIDI and CPAN (Spain); Swiss Funding Agencies (Switzerland); NSC (Taipei); TUBITAK and TAEK (Turkey); NASU (Ukraine); STFC (United Kingdom); DOE and NSF (USA). Individuals have received support from the Marie-Curie programme and the European Research Council (European Union); the Leventis Foundation; the A.P. Sloan Foundation; the Alexander von Humboldt Foundation; the Austrian Science Fund (FWF); the Belgian Federal Science Policy Office; the Fonds pour la Formation à la Recherche dans l'Industrie et dans l'Agriculture (FRIA-Belgium); the Agentschap voor Innovatie door Wetenschap en Technologie (IWT-Belgium); the Council of Science and Industrial Research, India; the Compagnia di San Paolo (Torino); and the HOMING PLUS programme of Foundation for Polish Science, cofinanced from European Union, Regional Development Fund.

Open access

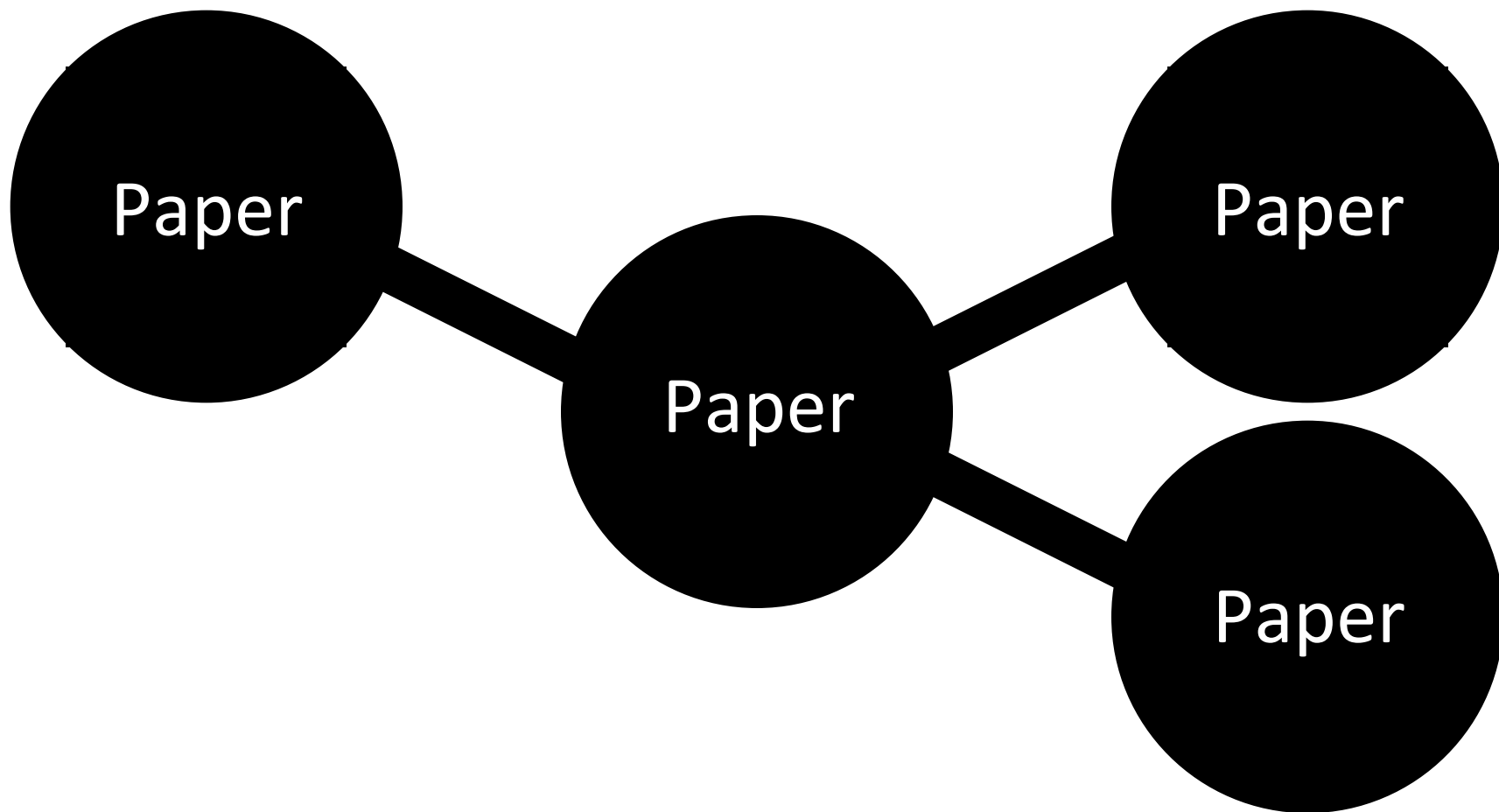
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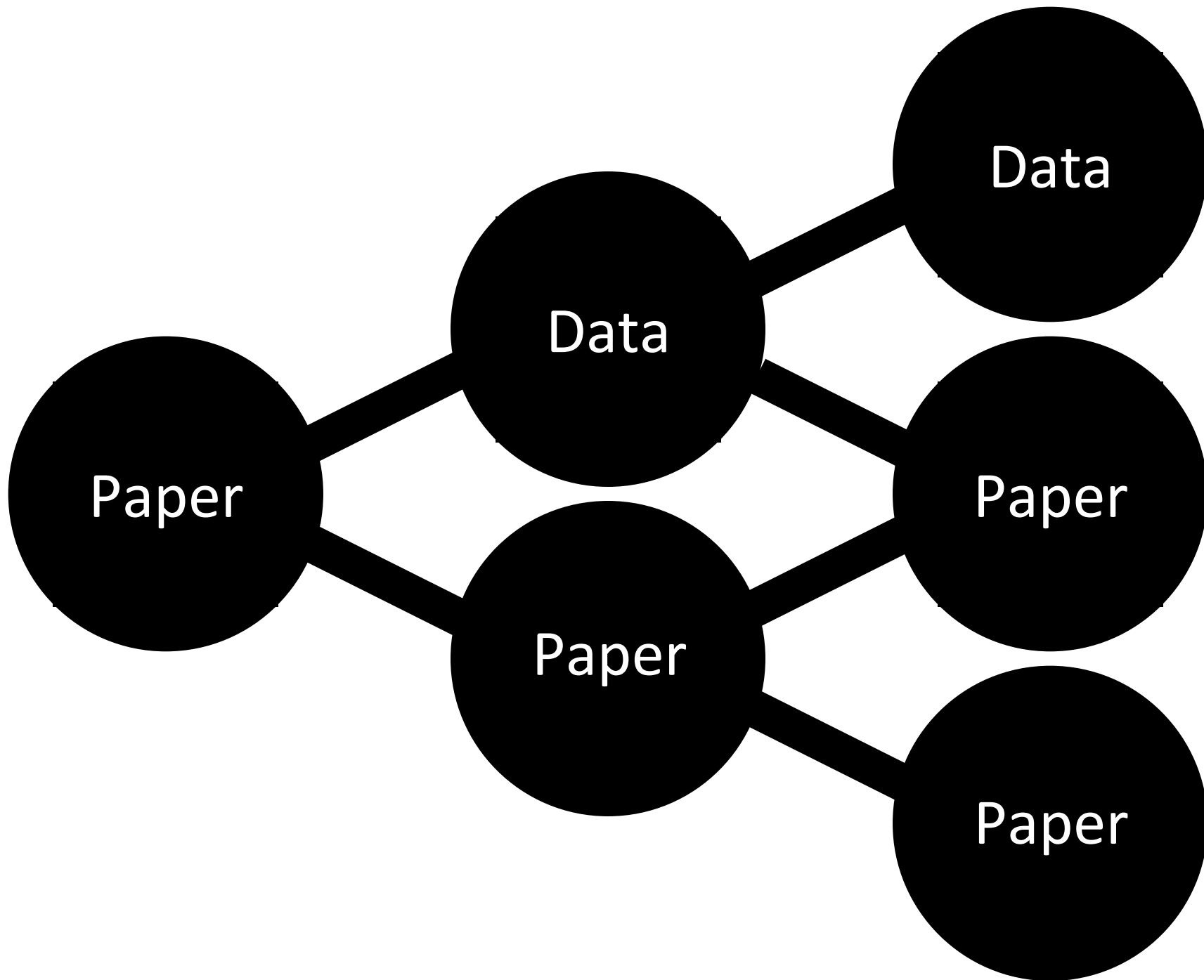
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More commonly, measured in citations!









How to enable researchers to share?



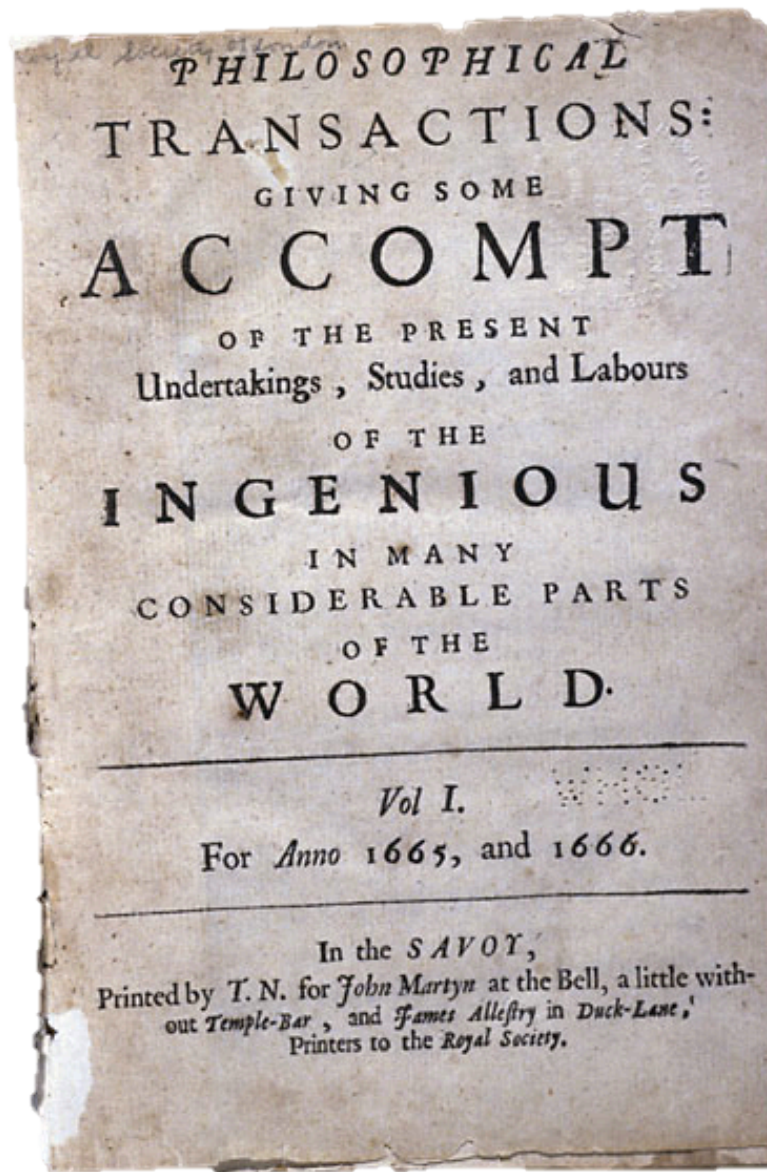
Data centres: tailored or scalable solutions for deposit and preservation of shared data



Funding agencies: support additional effort to
prepare, store, share data



Libraries: managing information beyond text,
data retrieval, citation, best-practice education



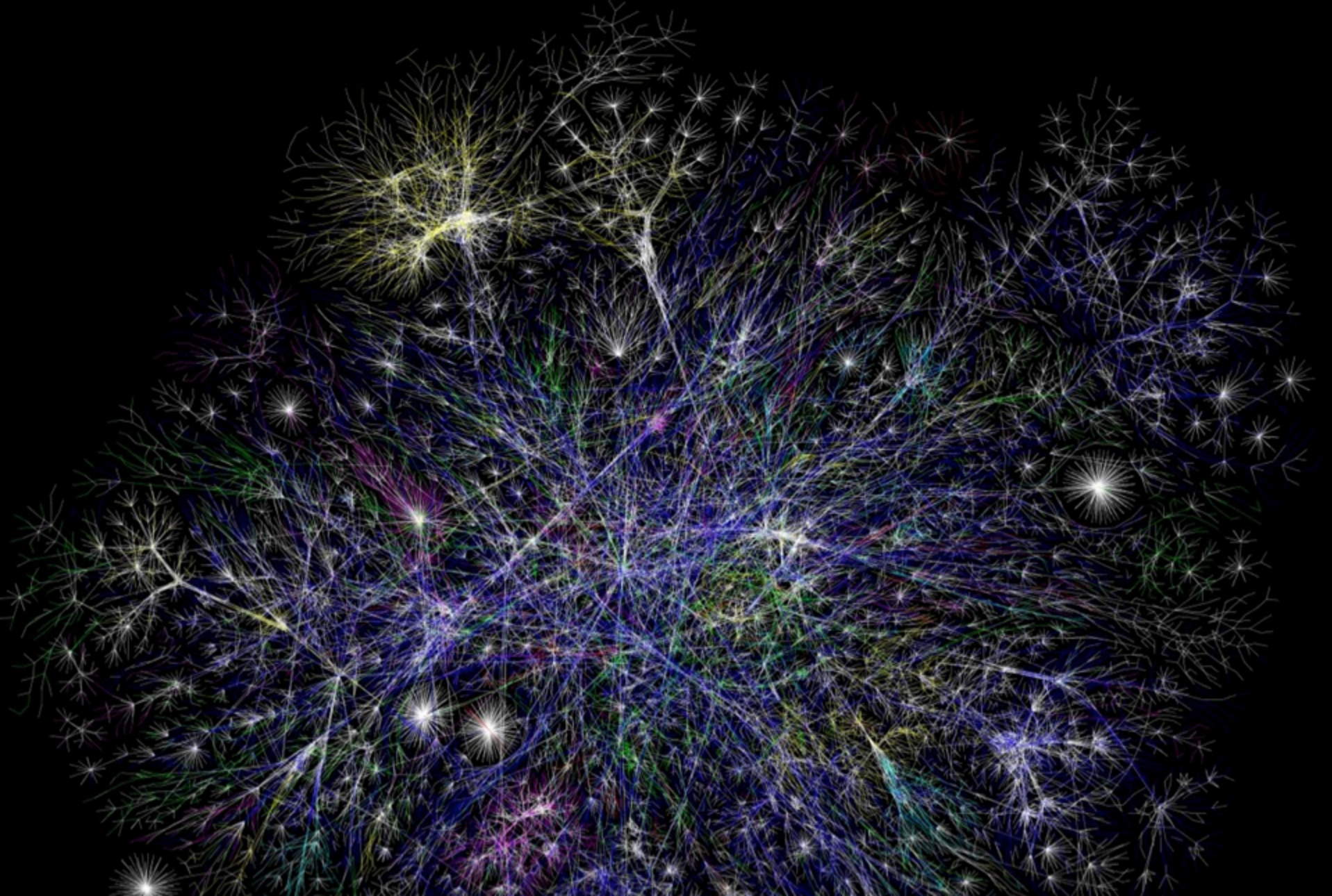
Publishers: integrate shared data in the record of science, with links, citations, interoperability

</concrete example>









Complex network



It is simple !

A circular arrangement of diverse hands reaching towards the center, symbolizing unity and partnership. The hands are of various skin tones, including light, medium, and dark brown, and are positioned in a way that suggests they are about to clasp or are already clasped together. The background is plain white.

**engage and
support
emerging
multi-stakeholder
partnerships**

APA Conference 2012 Programme

Wednesday 7th November

08:30 – 09:00	BioMed Central's open data initiatives – Iain Hrynaszkiewicz, Publisher, BioMed Central & GigaScience.
09:00 – 11:00	ODE PROJECT, Lessons Learnt Researchers and Funders: Tales of Challenges and Change Dr Hans Pfeiffenberger, HA The Library's Evolving Role in Scholarly Communications Dr Susan Reilly, LIBER Data and Publications, how to make things better Drs Eefke Smit, STM Data Centres and Data Sharing Dr Simon Lambert, STFC

11:00 – 11:30	Coffee Break
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11:30 – 13:00	ODE: Behind the Scenes and How It Affects You (Parallel Session)
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Remember the sessions tomorrow!

Thank you!

