

Journals, prices, peer review and open access

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Scholarly information in the academic world

- Journals
- Preprints
- The advent of the Internet
- Exchange of files (the 80's)
- The preprints archives (P.Ginsparg)
- The electronic journals (JHEP, JCAP;...)

A successful example: JHEP

- Born in 1997
- Publishes about 1000 papers per year
- Impact factor: 5-6
- Entirely electronic
- Average publ. Delay: 70-80 days
- Cost: about 10-15 times less than commercial competitors.

Electronic publishing at SISSA

- Open Access
 - Babbage: preprints archives, since 1992
 - Ulisse: science popularization since 2000
 - SISSA DL
 - JCOM
- Electronic Journals:
 - JHEP: since 1997
 - JCAP: since 2002
 - JSTAT: since 2004
 - JINST: since 2007

(pay per view going pay per publish: in 2007 1/3 of articles are OA)

Economic sustainability

- Present model: *pay per view* subscriptions
- Drawbacks: obsolete, too costly
- Open access: *author pays*, not very attractive
- Open access: from *pay per view* to *pay per publish* in the form *institution pays* (membership)
- SCOAP consortium

Evaluation of scientific work

- Evaluation indices: impact factors, *h* index, *a* index,...
- These are utilization indices, don't assess the scientific value
- To assess scientific value *peer review* indispensable
- Peer review has become too important for careers, promotions, funds, fellowships, etc.

Peer review

- Editor -> referee -> editor
- Open-closed scheme: referee secret
- Pros: scientific value of the paper is its object, paper improved, useless works discarded
- Cons: possible superficialities and abuses

Peer review: new ideas

- Closed-closed (secret referee- secret author)
- Open-closed (referee known – author secret)
- Open-open (both referee and author known)
- Two stages (free comments online followed by traditional peer review)

Peer review: warranties

- Peer review too important...
- Need of new tools
- Transparent procedures, minimal number of independent referees,
- Possibility of appeal (against abuses, plagiarism, errors, ...). A common board per scientific area?