

Scientific Posters

*A good poster can't make up
for bad research,
but a bad poster can make
good research hard to
recognize!*

www.waspacegrant.org/for_students/student_internships/wsgc_internships/posterdesign.html

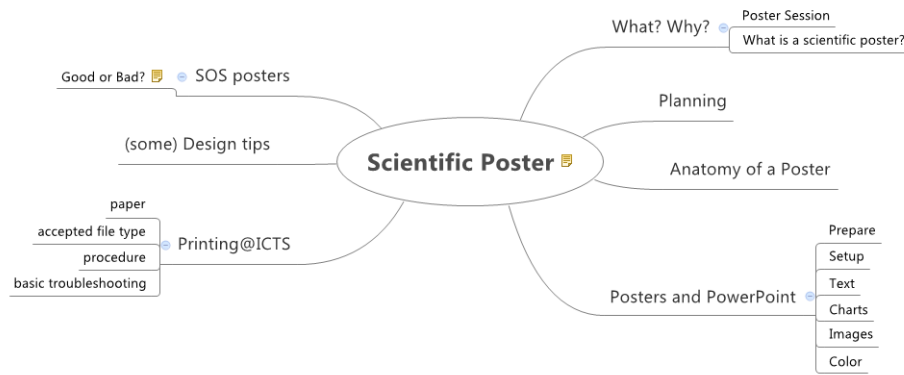
Introduction

1

Objectives + Disclaimer

- Scientific / Academic / Research / Conference Poster
- Design of a Scientific Poster
 - Not much research on design of Scientific Posters
 - Based on common / good practices
 - Create posters that are:
 - Readable
 - Informative
- Use PowerPoint to produce Scientific Posters
- Get them printed
- *No expert in the graphical design.*
 - *Grown out of user support.*
 - *Get the flavor, get an idea of what might be possible.*

2



Poster session? Scientific poster?

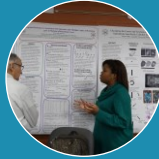
*"Criticism and testing are of the essence of our work.
This means that science is a fundamentally social activity,
which implies that it depends on good communication."*

-Hermann Bondi - Quoted by Robert A. Day in How to Write
& Publish a Scientific Paper. The Oryx Press (1998) p. ix.

Spectrum



Written Word
*Article, book, blog,
etc.*



Poster
Presentation



Verbal
presentation
Talk, keynote, etc



Why a poster?

- Advertising a workshop or conference.
- An overview.
- Outreach, communicating your research and activities to people outside your field.
- Results, show your results: partial, interim or final.

Poster session: definition

- Definition educause (<http://www.educause.edu/>):

*Poster sessions are **informal, drop-in sessions** that allow presenters to share their (campus) experiences with colleagues on a **one-to-one** basis. Poster presenters should be prepared to provide a **brief verbal explanation** of their experiences or applications that may be illustrated through a set of **visuals** attached to a large bulletin board or via laptops/screens, etc.*

- Other important elements:
 - **Location**
 - **Poster stand**

Scientific poster: definition/purpose

- A scientific poster is a method of **professional communication** that **visually** tells the **comprehensive**, but **condensed**, **story** of a research project. While a poster can be **effective alone**, a presenter at a planned gathering enhances the poster by **engaging** interested visitors in **dialogues** that:
 - explain the research,
 - expand the provided information, and
 - ensure the visitor leaves with the desired takeaway message about the project.(<http://cse.ksu.edu/files/cse/CSE%20Symposium%20PosterPresentation%202011.pdf>)
- The **purpose** of a **poster presentation** is to **create rapid, concise & visual communication of research**. (Hofmann, A. H. *Scientific writing and communication: papers, proposals, and presentations*; Oxford University Press: New York, 2010; pp 499-515)

Scientific poster: definition

- A poster is a **snapshot** of your research. It is neither as detailed as an article nor as brief as an abstract. The goal is provide **enough** information so that a detailed discussion can be carried out based on it, yet remain **short** enough that someone can scan the poster in a few minutes and understand what your research is about.

<http://library.mtroyal.ca/c.php?g=436471&p=2975480>

Scientific poster?

- **Initiate**
 - A poster is a conversation starter, a **communication tool** has useful information to point to during conversation
 - **Networking tool**
 - Opens up **discussion**
- Source of information
 - **Spread your ideas**
 - Summary / advertisement of your work
 - Poster must be **intriguing** and **straightforward**

Scientific poster?

- **Draw attention**

- Ad for a project, research, ...
- A few seconds to capture the attention
 - <https://www.nngroup.com/articles/how-long-do-users-stay-on-web-pages/>

- Eye catching

- **Communicate effectively**

- 3~5 min to get your message across
- Audience is walking (talking, eating, ..)
- Get the message across to as many people as possible



KU LEUVEN

12

Scientific poster?

- Timing

- Talk: 15 min
- Poster 5 min



Zen Faulkes
@DoctorZen

...

Poll! What's the average time you **WANT** to spend talking to a presenter at a conference poster?



289 votes - Final results

KU LEUVEN

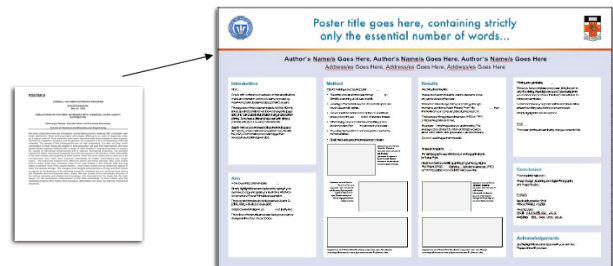
13

Scientific poster?

- **Large:** to be viewed from a distance
 - Will be photographed
- Is **hybrid** form of communication
 - Not a paper
 - Not an oral presentation
- **Stand on its own** and **backup your talk**
- **Synchronous:**
 - all the information is viewed at once
 - Scan from title to conclusions

Scientific poster?

- **Visual** communication: think graphically, not in words
 - Legible
 - Comprehensible (even without extra explanation)
 - Concise
 - Organized
 - Has something to say
 - Focused
- **Visual Abstract**



<http://www.cns.cornell.edu/documents/ScientificPosters.pdf>

Scientific poster?

- No poster design can be optimal for every viewer
- No last minute changes possible
 - The print is final
 - vs Talk: last minute changes are possible
- Talk vs Poster
 - Type of project
 - Size of conference
 - Presenter's comfort level

Bottom line

- Your poster should be a **visual tool** to help **share your research**.
 - It is not a comprehensive report of your research.
 - It serves to provide a brief summary of research results.
- Your poster should be a **conversation starter**
 - Attract the attention of conference attendees so that you can start a conversation.
 - It should give an opportunity to get feedback, ideas, and to network.

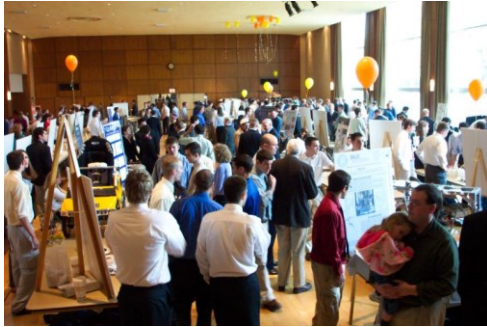
Purpose of the poster

1. Look at me
2. Read me
3. Ask me

Note: Traditional poster vs ePoster

- Traditional poster
 - Printed on paper
 - Recent development: printing on canvas
- ePoster
 - ePoster is the digital version of traditional posters.
 - Environmentally-friendly initiative
 - Setup might be different
 - <https://www.nanoge.org/HOPV20/eposter>
 - ePoster will be also presented through a Flash Talk during the ePoster Session.
 - Extended discussions and close conversations about the ePosters presented will take place in different meeting points onsite.

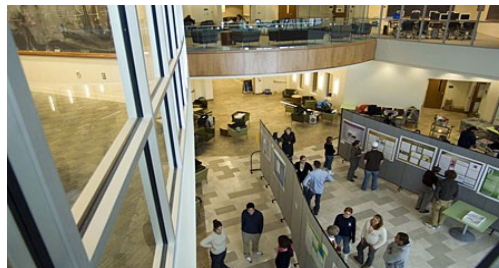
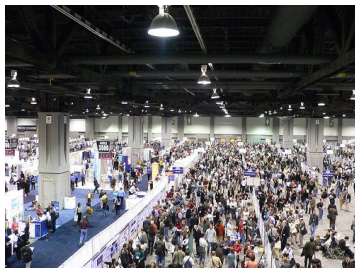
Poster session: location



KU LEUVEN

25

Poster session: location



KU LEUVEN

26

Poster session: location

<https://www.reintro.org/posters>



<https://simuleurope.org/products/e-posters/>



KU LEUVEN

27

Poster wisdom

KU LEUVEN

28

Sources: websites

- Zen Faulkes blog + Book **Better Posters**
betterposters.blogspot.com
- Colin Purrington
colinpurrington.com/tips/academic/posterdesign
- Better Scientific Poster
<https://osf.io/ef53g/>
- Justin Matthews
<http://justinmatthews.com/posterhelp/posterguide/>
- <https://ohiostate.pressbooks.pub/scientificposterguide/>
- [UNC Academic Presentations and Posters](#)

Bad poster bingo

Different parts of poster don't line up	Boxes within boxes	Zigzag reading order	More than three typefaces	Long-winded title
Gradient fills in coloured boxes	Big blocks of text	Photographic background	Unlabelled error bars on graphs	Pixelated pictures
More than five colours	Institutional logos bookending title	Free space	ALL CAPITALS	Text with shadows, <i>outlines</i> , or bevels
Abstract	Underlined text	Comic Sans	3-D graphs	Checking tablet or phone during presentation
Tables showing data that could be in a graph	Poster does not fit on poster board	Comic Sans (it's that annoying)	Objects almost touching or overlapping	Try, um, readable type

By Zen Faulkes, betterposters.blogspot.com

Inspired by: <http://www.monicaetzler.com/bad-presentation-bingo/>

KU LEUVEN

29

Sources

- Professional poster printing (tips + templates)
 - <https://www.poster nerd.com/sciposters-templates>
 - <https://www.posterpresentations.com/index.html>
 - <https://phdposters.com/>
 - <https://www.brightcarbon.com/blog/effective-academic-posters-powerpoint/>

KU LEUVEN

31

Sources

- Oxford Scientific Poster workshop
 - <https://skills.it.ox.ac.uk/posters-improving-your-research-posters-course-pack> (login required)
 - <https://skills.it.ox.ac.uk/files/itlcppr001notespostersimprovingpdf>
- Poster journal – Get inspired!
 - <https://www.epostersonline.com/>
 - <https://eposterslive.com/>
 - www.eposters.net turned into <https://www.technologynetworks.com/tn/posters/>

