Making Posters

Plus some thoughts on the rules of scientific communication

A. Rakhubovsky

Department of Optics, UPOL

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Please Interrupt!

Outline

What we expect

What we get

What we get

What we get

What we get


200
Volcanology, Geochemistry, and Petrology
0205 - 0235
0267 - 0297

What we get

Last two pics: Google "AGU (Americal Geophysical Union) Meeting"

What we get

Posters for different purposes

Poster that hangs on a wall

Posters for different purposes

Poster that hangs on a wall

Poster that you hang out next to

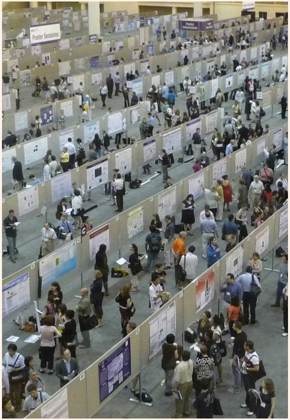

Image source: Wikipedia "Poster Session"

DALL-E: 'research institute corridor with scientific posters on the walls'

DALL-E: 'research institute corridor with scientific posters on the walls'

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Our goal poster

Main Misconception About the Conference Posters

No one reads them

The Plan of the Presentation

Grab the attention

Try to not lose the attention

The Plan of the Presentation

Grab the attention

- Interesting title
- Large and nice figures

Try to not lose the attention

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- Keep things simple

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Prepare different level of details

- A few sentences summary
- "Elevator talk" — presentation in three minutes
- …
- The full talk

The Plan of the Presentation

Grab the attention

- Interesting title
- Large and nice figures

Try to not lose the attention

- Keep things simple

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- A few sentences summary
- "Elevator talk" — presentation in three minutes
- …
- The full talk

This is difficult

Seriously

Outline

Structure of Research/ The Problem

$\boxed{?}$

Problem

Structure of Research/ The Problem

$\boxed{?}$

Problem

$\boxed{\text{Knowledge Before}}$

Structure of Research/ The Problem

$\boxed{?}$

Problem

$\boxed{\text{Knowledge Before}}$

+

$\boxed{\text{Tools}}$

Structure of Research/ The Problem

$\boxed{?}$

Problem

$\boxed{\text{Knowledge Before}}$

$+$

$\boxed{\text{Tools}}$

$=$

$\boxed{\text{Knowledge After}}$

Practical Steps

Pick contents

Determine the main contribution

Write it down in 3 sentences + 1 figure

Prepare supporting data (definitions + graphs)

Sketch (pen + paper)

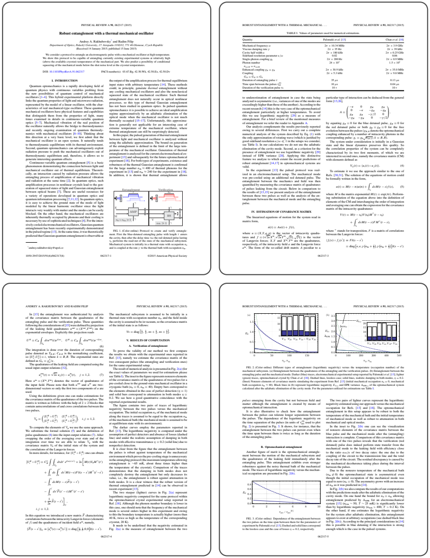
Make a few (2-4) sketches with different layout

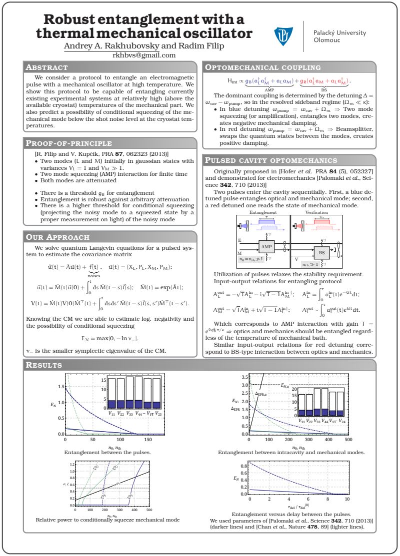
Implement

Decide the tools (programs)

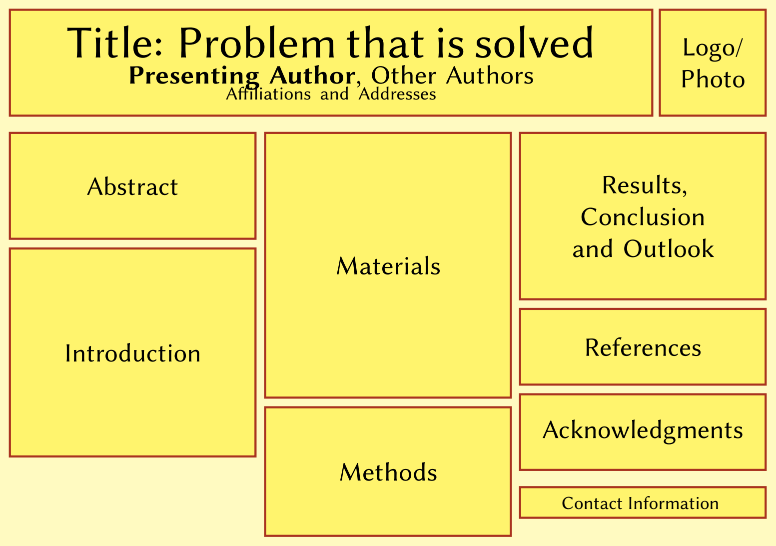
Choose the looks (fonts + colors)

Example Structure





What the people typically expect to see on a poster



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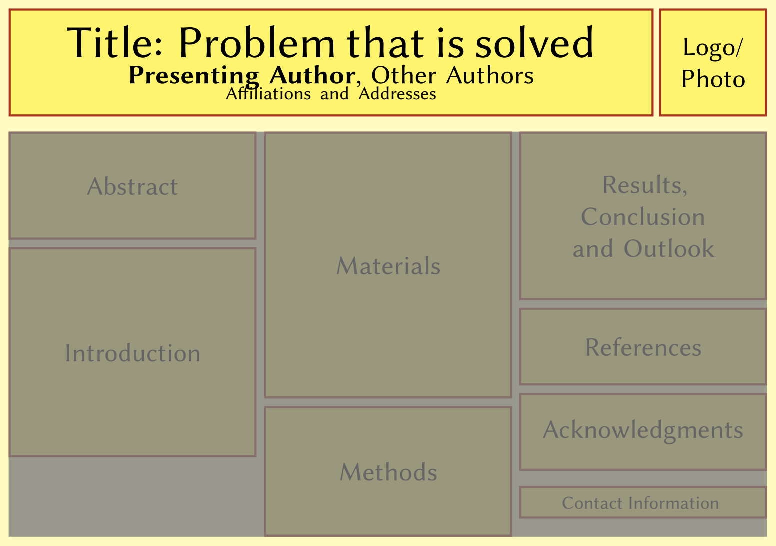

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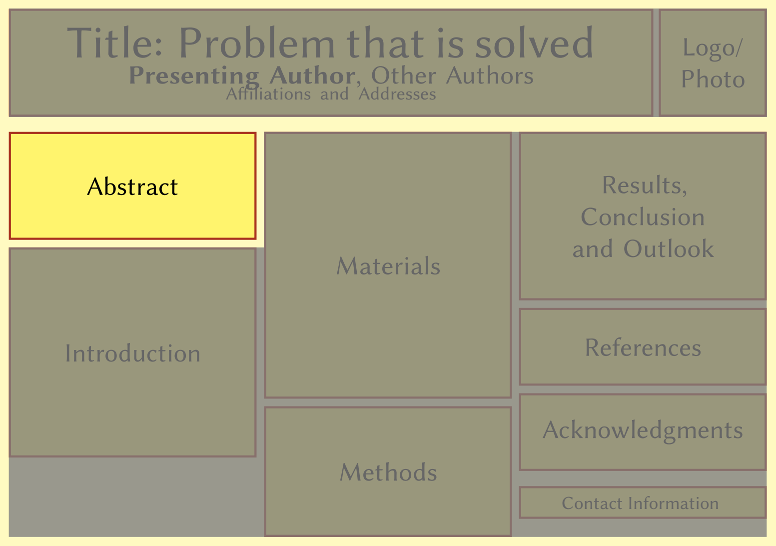

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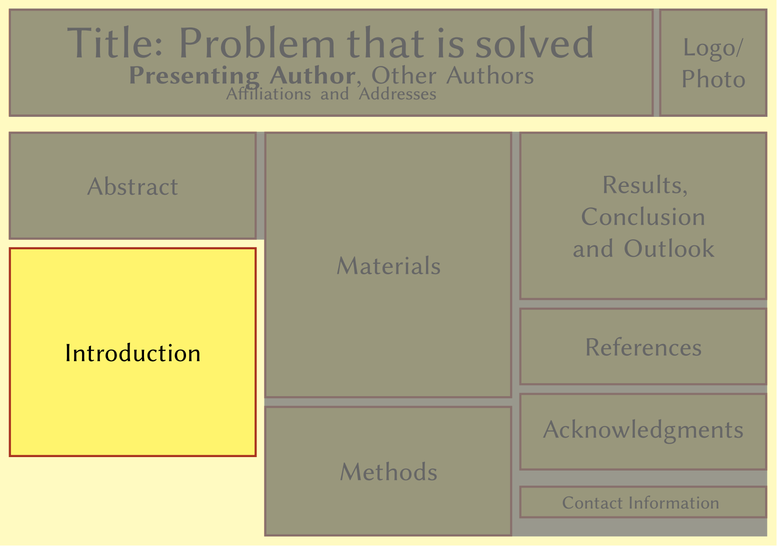

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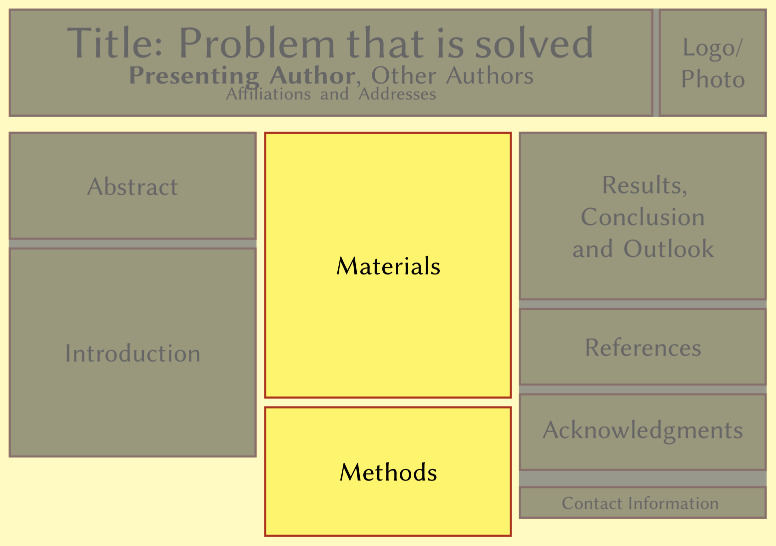

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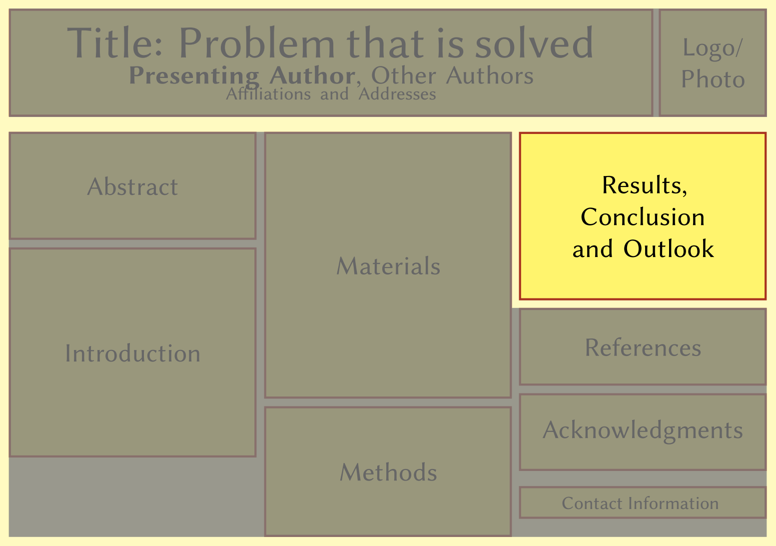

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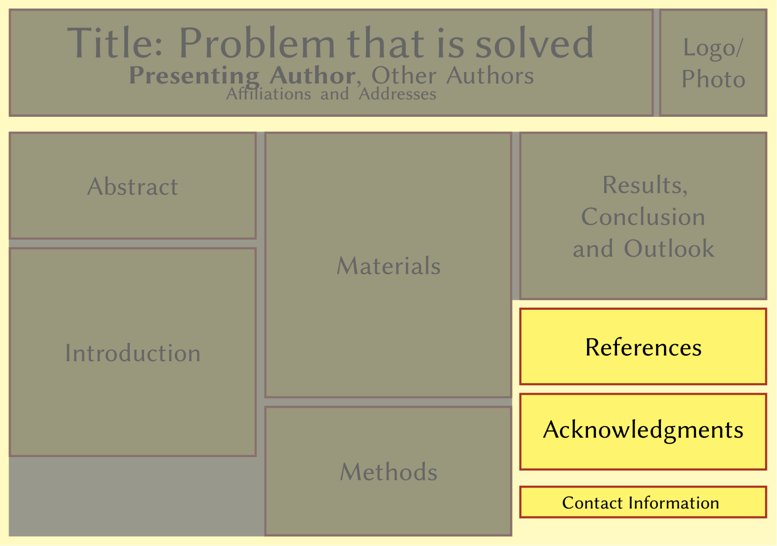

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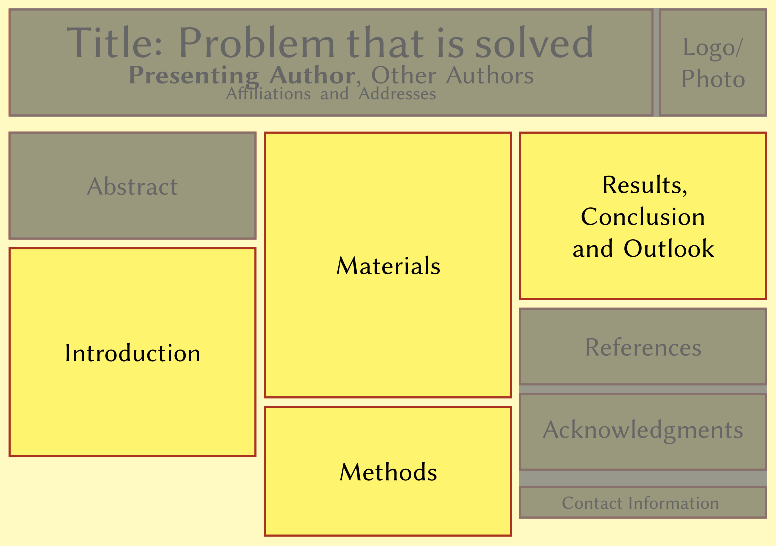

Which is which

Title
Extremely shortened contents

Abstract
Significantly shortened contents

Introduction
Motivation & Reviews & Definitions

Materials&Methods
The contents of your research

Conclusion
Slightly shortened contents

References
List of literature

Contact Information
Your email/ QR codes/ links to articles/ blogs etc.

Outline

Tools (Software)

Presentation making software

PowerPoint
OpenOffice/LibreOffice Impress
Keynote
Google Slides

Vector Editors

Adobe Illustrator
Corel Draw
Inkscape
OpenOffice/LibreOffice Draw

Publishing Software

Microsoft Publisher, Adobe InDesign

LaTeX

Overleaf template library

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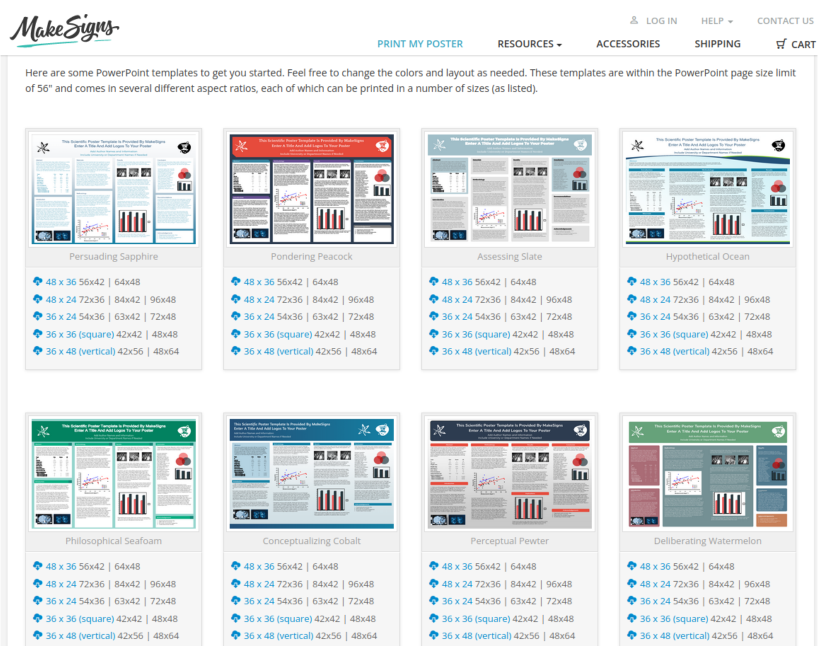
Web search “Conference Poster Template”

Examples From the Internet



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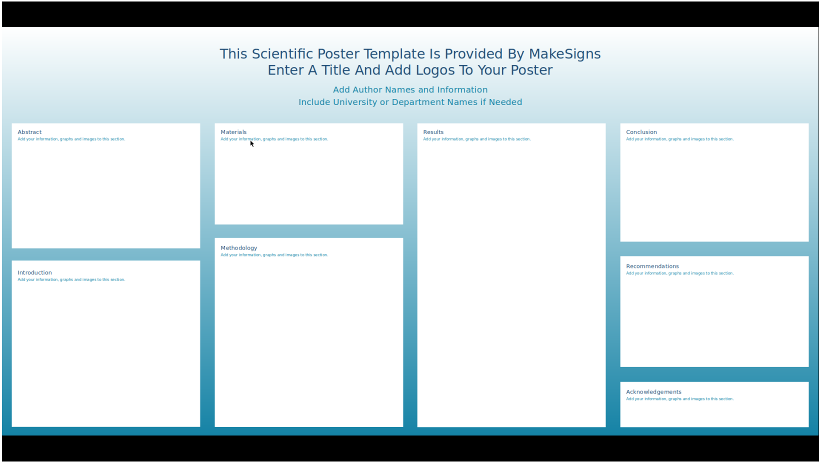


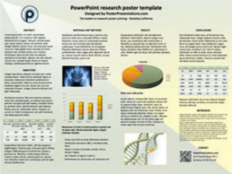
Examples From the Internet

Poster template design: **Aragon**

Standard poster sizes in inches (Height x Width) - Click on a size to download
36x48 | 36x56 | 36x60 | 36x72 | 36x96 | 42x60 | 42x72 | 42x90 | 44x44 | 30x40 | 48x48 | 48x72 | 48x96 | Trifold | Virtual - Standard Screen (4:3 Ratio) | Virtual - Wide Screen (16:9 Ratio)

Standard poster sizes in centimeters (Height x Width) - Click on a size to download
122x91 | 100x70 | 140x100 | 100x100 | 200x100 | A0 | A1

► View Samples ► Learn how to customize the template colors



Poster template design: **Beaumont**

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Poster template design: **Newfield**

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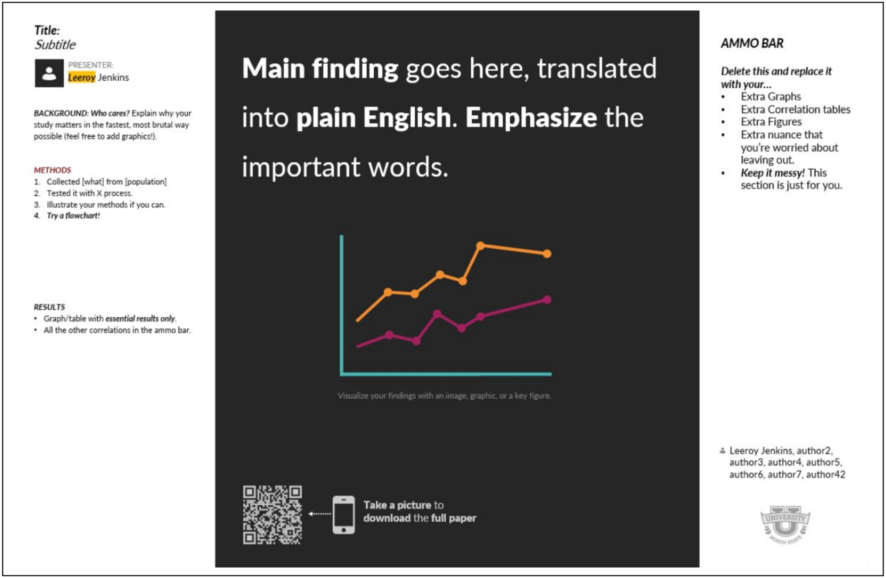
#betterposter on Twitter



#betterposter on Twitter

How Are You Feeling Today, Dave?
Using IBM's Watson Supercomputer to Extract Emotions from Natural Language

Mike A. Morrison

INTRO
- **IBM Watson** is a supercomputer able to process naturally written language. It can reportedly read a body of text, and extract from that the emotions that the author was feeling when they wrote it.
- **This study** compared Watson's ratings of emotional tone in text to self-report ratings, using a sample of crew members participating in NASA analog science mission in Antarctica.

METHODS
- **Participants:** N = 6 crew members participating in a NASA Science Mission in Antarctica. T = 42 (average) mission days per crew member
- **Diaries:** Crew members **wrote freeform** in **daily diaries** each day. Diaries typically discuss activities from the day, and other crew members.
- **Self-Reports:** Crew members completed self-report measures of psychological distress, happiness, conflict management, and physical activity.
- Using Watson's Alchemy Language service, **Watson analyzed diary text** and reported estimates of Fear, Joy, Sadness, Anger, and Disgust in each diary entry.
- **Analysis:** I tested for significant correlations between Watson's measures of Fear, Joy, Sadness, Anger, and Disgust against a battery of self-report measures of daily attitudes.

RESULTS
- Watson's estimates of happiness and sadness correlate significantly with related self-report measures, but Watson's estimates of disgust, fear, and anger showed no significant correlations.

MICHIGAN STATE UNIVERSITY

IBM Watson can accurately **detect joy** and **sadness** in samples of **written language.**

	Watson **Happiness**	Watson **Sadness**
Self-report **Happiness**	.21**	-.22**
Self-report **Distress**	ns	.19*
Self-report **Conflict Management**	ns	-.24*
Self-report **Physical Activity**	.19**	-.25**

Participants:
- N = 6 crew members participating in a Science Mission in Antarctica
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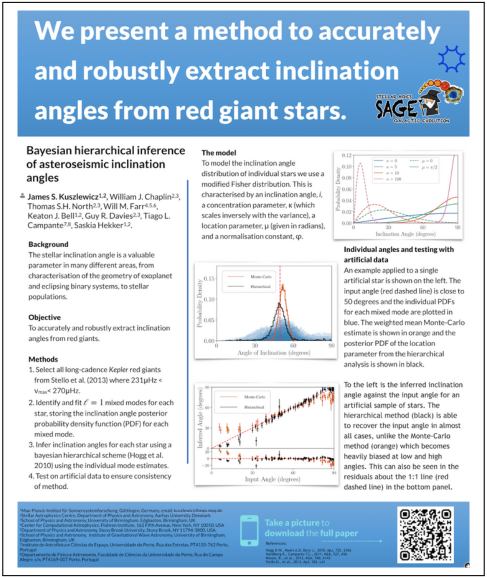
How do Natural Language Processors Like IBM Watson Work?

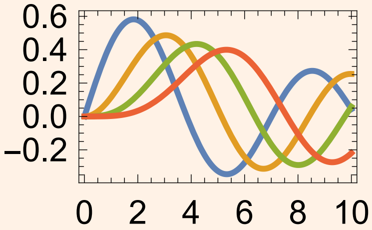
1. A software algorithm reads-in a body of text (in this case, a diary entry).
2. The text is converted into features (e.g., frequency of specific words, punctuation usage, sentence length).
3. An algorithm identifies which features in the text are associated with scores on a 'known' criteria (e.g. self-reported happiness, or other-rated emotional tone).
4. Machine learning algorithms create a set of combined language features that reliably predict scores on the criteria of interest in the test data.
5. The 'trained' algorithm looks for these special features in new bodies of text, and outputs an estimate of the criteria.

#betterposter on Twitter

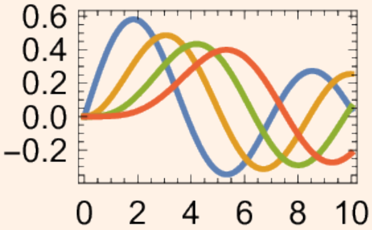


Use Vector Graphics

Vector



Raster



Vector Editors: Adobe Illustrator, Corel Draw, Inkscape, OpenOffice Draw
I use LaTeX which is a markup language

Use Vector Graphics

Vector

Raster

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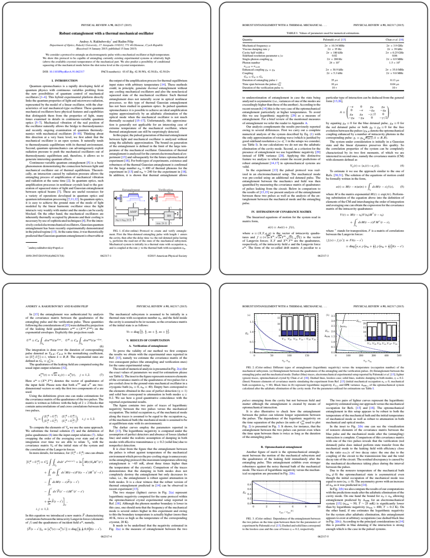

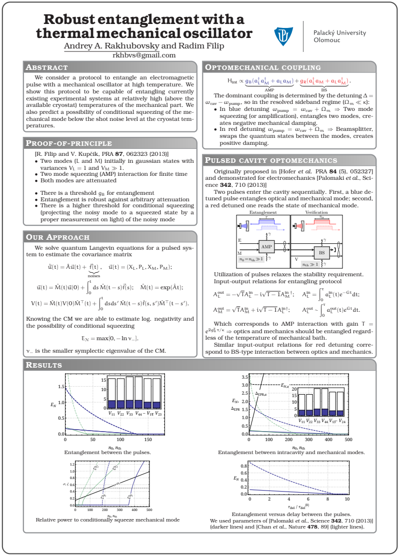

Importance of Vector graphics

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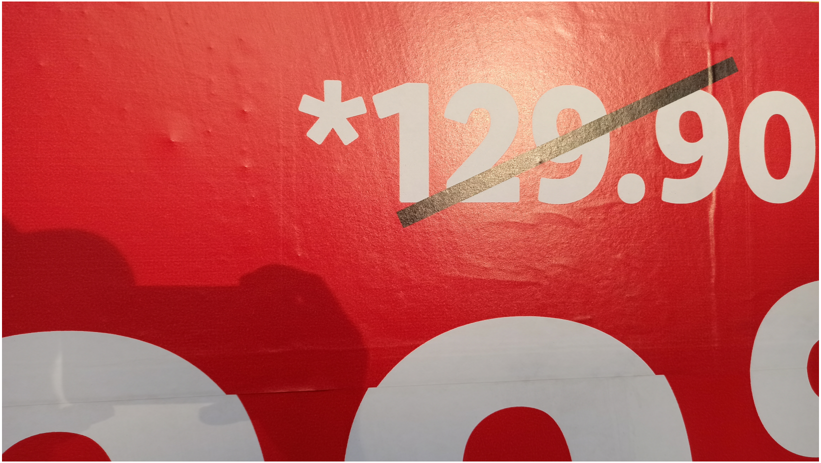


Importance of Vector graphics

Which Fonts to Use

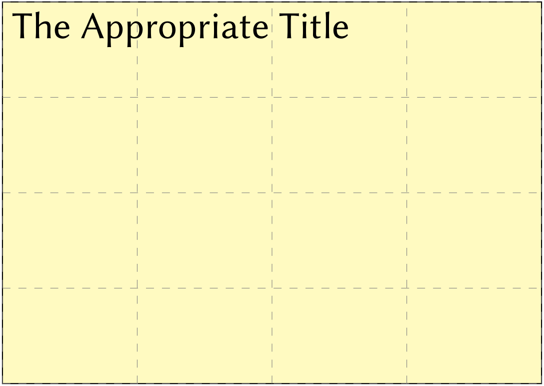
Sans-Serif	Serif
It doesn't matter how beautiful your theory is, it doesn't matter how smart you are. If it doesn't agree with experiment, it's wrong. Richard Feynman	It doesn't matter how beautiful your theory is, it doesn't matter how smart you are. If it doesn't agree with experiment, it's wrong. Richard Feynman

Sans-Serif fonts: Helvetica, Arial, Bitstream Vera, DejaVu, whatever
I use Linux Biolinum / Linux Libertine
Avoid Microsoft ComicSans

Font Size

USE LARGE FONT!

Text	24 pt
Headings	48 pt
Titles	72 pt



Adjust line separation

Fall in love with some activity, and do it! Nobody ever figures out what life is all about, and it doesn't matter. Explore the world. Nearly everything is really interesting if you go into it deeply enough. Work as hard and as much as you want to on the things you like to do the best. Don't think about what you want to be, but what you want to do. Keep up some kind of a minimum with other things so that society doesn't stop you from doing anything at all.

R. Feynman

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Divide text into paragraphs

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Adjust line length

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Use Appropriate Colors

Use high contrast colors, like black on a light color.

Avoid green on other ligths.

Try to use emphasis moderately, as multiple emphasized words only **cause loss** of attention, complicate the comprehension and look awful.

Do not fill background.

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Avoid green on other ligths.

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Do not fill background.

Zeroth rule of typography

You can break any rule as long as you are aware of it

Outline

Conclusions

The poster is your way
to convey your message

Message

- Be able to grab the attention
- Provide necessary introduction
- Supplement the needed details

Text and Graphics

- Work on graphical parts
- Make the poster readable

Conclusions

The poster is your way
to convey your message
with help of text and graphics

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Conclusions

The poster is your way
to convey your message
with help of text and graphics

to the people who came to grab a beer

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Text and Graphics

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Last Minute Checklist

Images do not pixelate on zooming in

Text is readable (font sizes are appropriate)

Spelling is correct