

Academic Writings and Presentations

Presentation

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Syllabus

- Introduction
- Useful tools
- Academic writing
- **Presentation**
 - **Organization**
 - **PPT presentations**
 - **Poster presentations**
- Practices, discussions, and exams

References

- Wallwalk, *English for Presentations at International Conferences*, Springer-Verlag New York, 2010

- "Seminar on seminars: How to give a talk"
 - Kenneth Suslick, University of Illinois Urbana-Champaign
 - <http://www.scs.illinois.edu/suslick/seminars.html>

- Lots of useful resources in www
 - *use Google and Youtube*
 - bilibili.com
 - watch TED Talk: www.ted.com

Outline

- **Why to do presentations?**

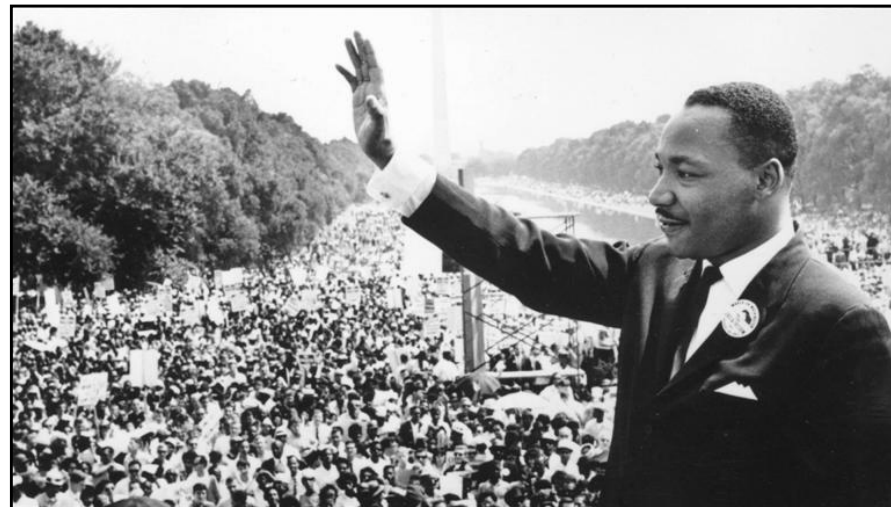
- **How to give a PowerPoint presentation?**
 - **how to prepare your slides**
 - **how to present your talk**

- **How to give a Poster presentation?**

Why to do presentations?

***Many papers are only read by ~5 persons:
Yourself, your advisor and 3 reviewers***

***Oral presentations can attract a broader
audience.***



Why to do presentations?

- make your research and yourself **more visible**
- face-to-face communication, better **networking**
- know more people in the community
- establish collaboration
- get funds / jobs / degrees
- ...

Basic Suggestions

- **Work hard**
- **Be prepared**
- **Practice, Practice, Practice!**

***Most people neglect these basic rules.
Follow them in this course,
and you will be ahead of the game.***

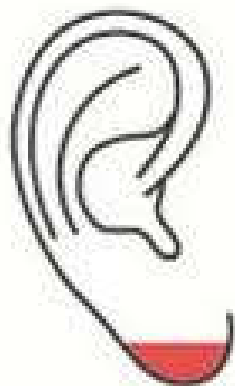
Outline

- **Why to do presentations?**
- **How to give a PowerPoint presentation?**
 - **how to prepare your slides**
 - **how to present your talk**
- **How to give a Poster presentation?**

Why are PPT slides important?

- Visual information dominates our perception

People remember:



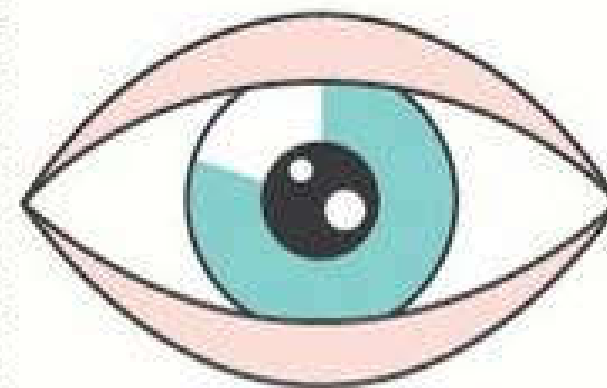
10%

of what they **HEAR**



20%

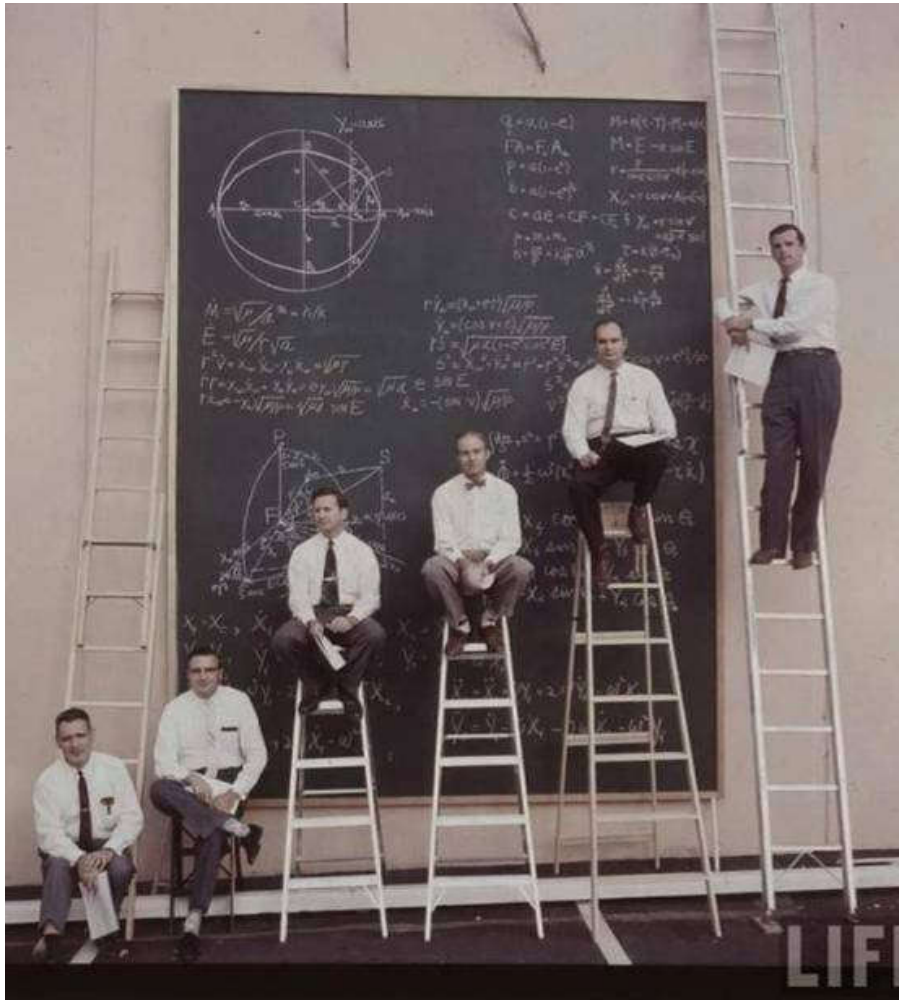
of what they **READ**



80%

of what they **SEE and DO**

In Ancient Days



blackboard



slide 幻灯片

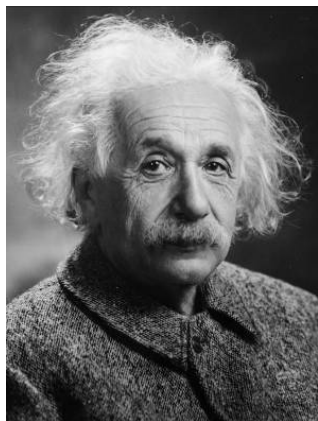
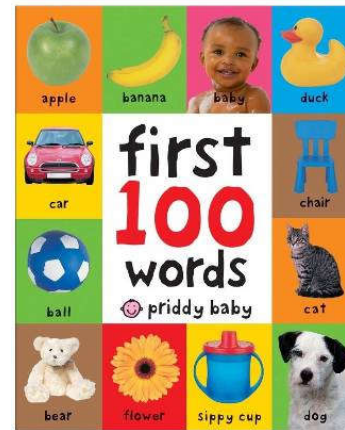
overhead projector

Questions

- **Who** will be your audience?
- **When**: How long will be your presentation?
- **Where** will you present?
- **What** you should tell?
- **How** to prepare?

Who will be your audience?

- Better to aim just a little low than too high**



$$\begin{aligned}
 \tilde{G}(p, p', q) &= \langle \Omega | T \tilde{\psi}(p') \tilde{A}^\mu(-q) \tilde{\psi}(-p) | \Omega \rangle = \\
 &= \int d^4x \langle 0 | T \tilde{\psi}(p') \tilde{A}^\mu(-q) \tilde{\psi}(-p) (-\lambda) \bar{e}(x) \gamma^\rho e(x) A_\rho(x) | 0 \rangle = \\
 &= (-\lambda) \int d^4x d\hat{p}' d\hat{q} d\hat{p} e^{i\hat{p}'p' - \hat{q}q - \hat{p}p} \langle 0 | T \psi(\hat{p}') A^\mu(\hat{q}) \bar{\psi}(\hat{p}) \bar{e}(x) \gamma^\rho e(x) A_\rho(x) | 0 \rangle = \\
 &= (-\lambda) \int d^4x d\hat{p}' d\hat{q} d\hat{p} e^{i\hat{p}'p' - \hat{q}q - \hat{p}p} D_\rho^\mu(\hat{q} - x) S(\hat{p}' - x) \gamma^\rho S(\hat{p} - x) = \\
 &= (-\lambda) (2\pi)^4 \delta(p' - q - p) \tilde{D}_\rho^\mu(q) \tilde{S}(p') \gamma^\rho \tilde{S}(p)
 \end{aligned}$$

Do not assume seniors are always experts

Who else are presenting?

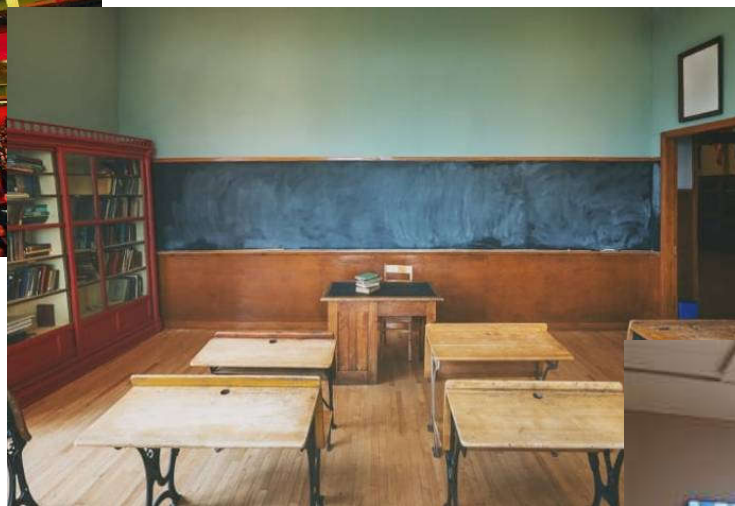
- **Look at the titles and names of other talks**
 - **Know your peers, collaborators, competitors, ...**

- **How to stand out?**
 - **more interesting topics**
 - **better results**
 - **better PPT slides**
 - **better English**
 - **...**

How long is your presentation?

- **Keep to the schedule**
 - **never go over time, people will hate you!**
 - **do not go over 50 mins, due to physiological reasons**
- **Save time for questions (~ 20%)**
 - **Example: if you have 30 mins, talk for ~ 25 mins**
 - **prepare for unexpected delays**
- **1–2 mins per slide**
- **Real presentations are **always faster** than your practice talks**

Where will you present?



- PPT?
- Chalk talk?
- Laser pointer?
- Microphone?
- ...

What should you tell?

- *Only focus at one topic*

**Tell them what you are going to tell them,
then tell them the details,
then tell them what you told them.**

- **Prepare a two-minute talk to summary the key points**
 - **write down notes on important things**

What should you tell?

The Ebbinghaus Forgetting Curve

Retention

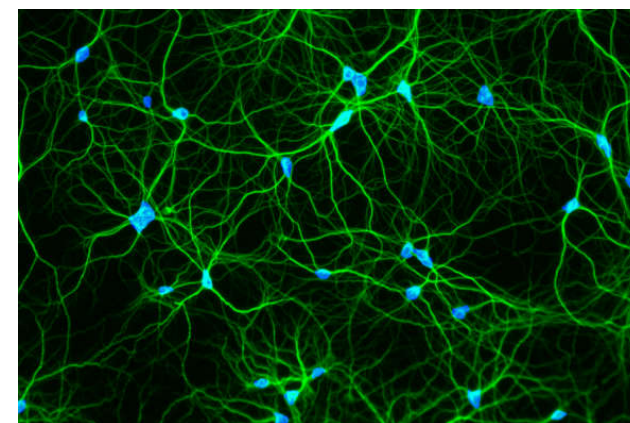
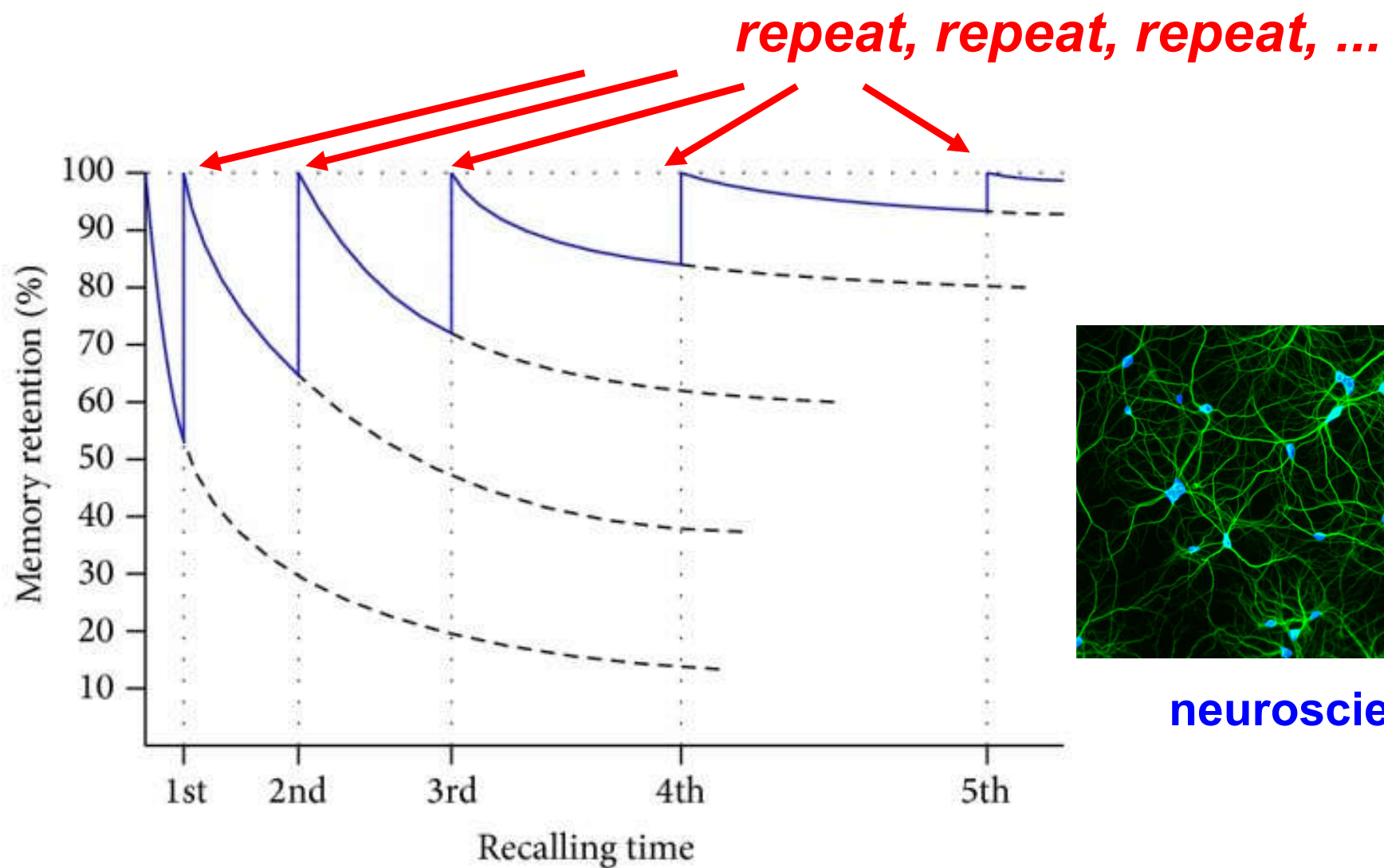


H. Ebbinghaus
1885

*what you want
people to remember*



What should you tell?



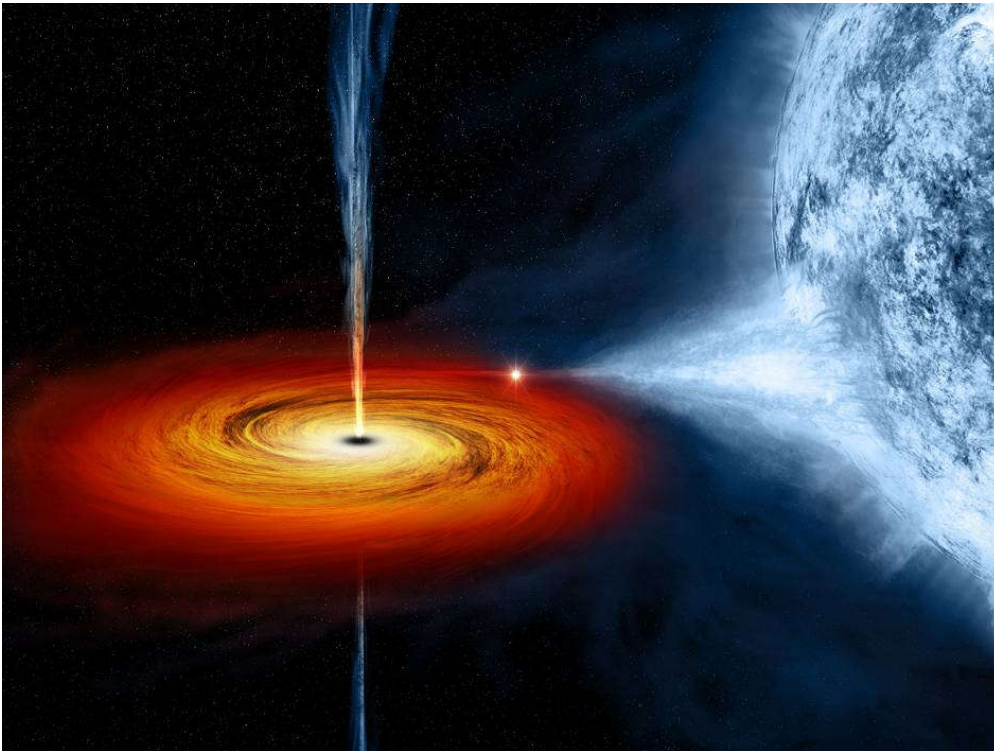
neuroscience

What should you *not* tell?

- Things unrelated to your topic
- Things you do not understand
- Trade secrets / classified / unlawful information
- Be careful about unpublished results
- Ask your advisors / sponsors for approval

What should you *not* tell?

- **Never** show things you do not understand
 - People will ask questions!



$$\begin{aligned}
 0 &= \frac{1}{2} F^{\sigma\tau} (F_{\tau\sigma;\nu} + F_{\sigma\nu;\tau} + F_{\nu\tau;\sigma}) - *F_{\nu\sigma} * F^{\tau\sigma}_{;\tau} \\
 &= (F^{\sigma\tau} F_{\sigma\nu;\tau} + \frac{1}{2} F^{\sigma\tau} F_{\tau\sigma;\nu}) - *F_{\nu\sigma} * F^{\tau\sigma}_{;\tau} \\
 &= \left((F^{\sigma\tau} F_{\sigma\nu})_{;\tau} - \frac{1}{4} (F^{\sigma\tau} F_{\sigma\tau})_{;\nu} - F_{\nu\sigma} F^{\tau\sigma}_{;\tau} \right) - *F_{\nu\sigma} * F^{\tau\sigma}_{;\tau} \\
 &= \left((F^{\sigma\mu} F_{\sigma\nu})_{;\mu} - \frac{1}{4} \delta^{\mu}_{\nu} (F^{\sigma\tau} F_{\sigma\tau})_{;\mu} - F_{\nu\sigma} F^{\tau\sigma}_{;\tau} \right) - *F_{\nu\sigma} * F^{\tau\sigma}_{;\tau} \\
 &= \left(F^{\sigma\mu} F_{\sigma\nu} - \frac{1}{4} \delta^{\mu}_{\nu} F^{\sigma\tau} F_{\sigma\tau} \right)_{;\mu} - F_{\nu\sigma} F^{\tau\sigma}_{;\tau} - *F_{\nu\sigma} * F^{\tau\sigma}_{;\tau} \\
 &= 4\pi \left[\left(-T^{\mu}_{\nu(\text{Maxwell})} - \kappa_{\nu} \right) - *F_{\nu\sigma} P^{\sigma} \right]
 \end{aligned}$$

How to prepare your content?

- **Title, your name, affiliation**
- **Outline**
- **Background**
- **Results**
- **Summary**
- **Acknowledgement**

Timeline

Suggested time distribution for 30 mins talk

- Title, your name, affiliation } 1-2 mins
 - Outline } 1-2 mins
 - Background — 5 mins
 - Results — 15 mins
 - Summary } 1-2 mins
 - Acknowledgement } 1-2 mins
- + 5 mins Q&As

FIRST and LAST sentences

- Title, your name, affiliation
- Outline
- Background
- Results
- Summary
- Acknowledgement

**Hi. I am XXX from XXX.
Today I will talk about ...**

**... Finally, thank you for
your attention.**

Do NOT miss them!

First slide

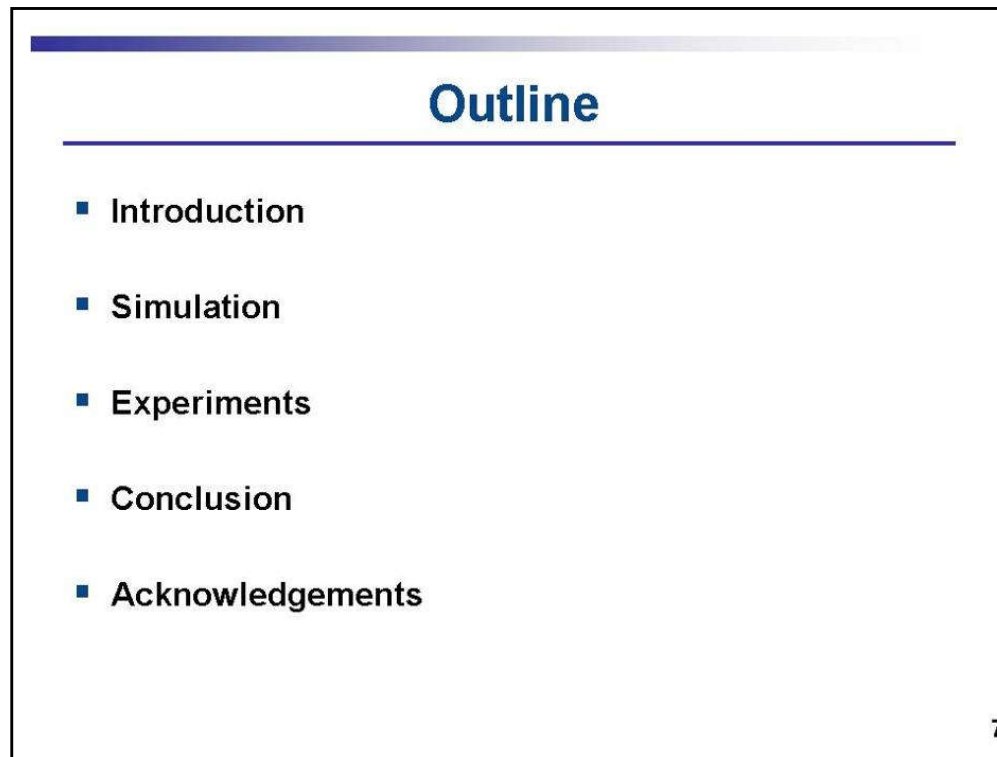
- **Title, your name, affiliation**



- **Other things are possible**
 - **conference name, logo, email, pictures, ...**

Outline

- You do not need an outline slide for < 10 min talk
 - only do it for a long talk

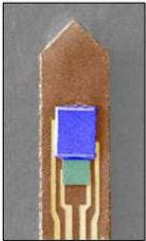




a mediocre example ---- no information

Outline

- You do not need an outline slide for < 10 min talk
 - only do it for a long talk

Outline

- Our interests
 - advanced photonic devices for biomedical use
- Implantable photometer
 - 
 - 
 - 

PNAS 115, E1374 (2018)
- Future work
 - multi-site neural recording
 - optogenetic stimulation, electrical recording, drug delivery

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a better example ---- be informative

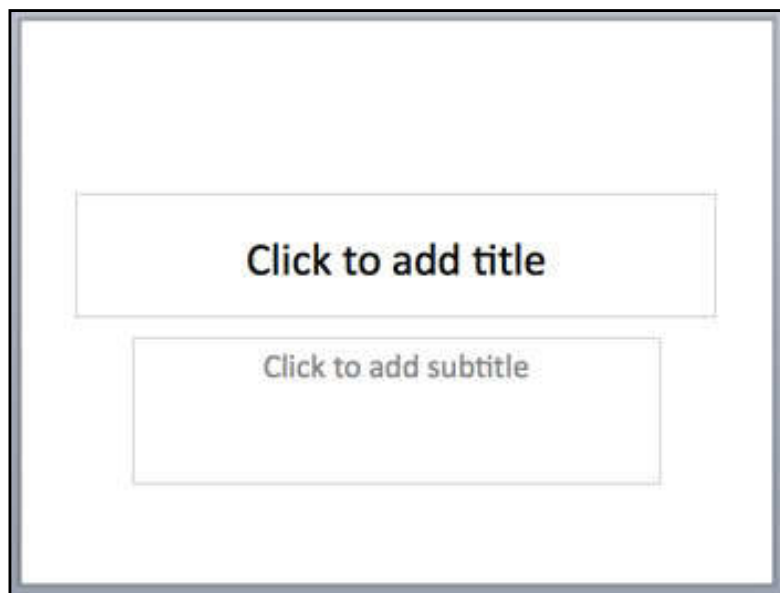
General format

- **'4 C' rule**
 - **Clear**
 - **Concise**
 - **Complete**
 - **Comprehensive**

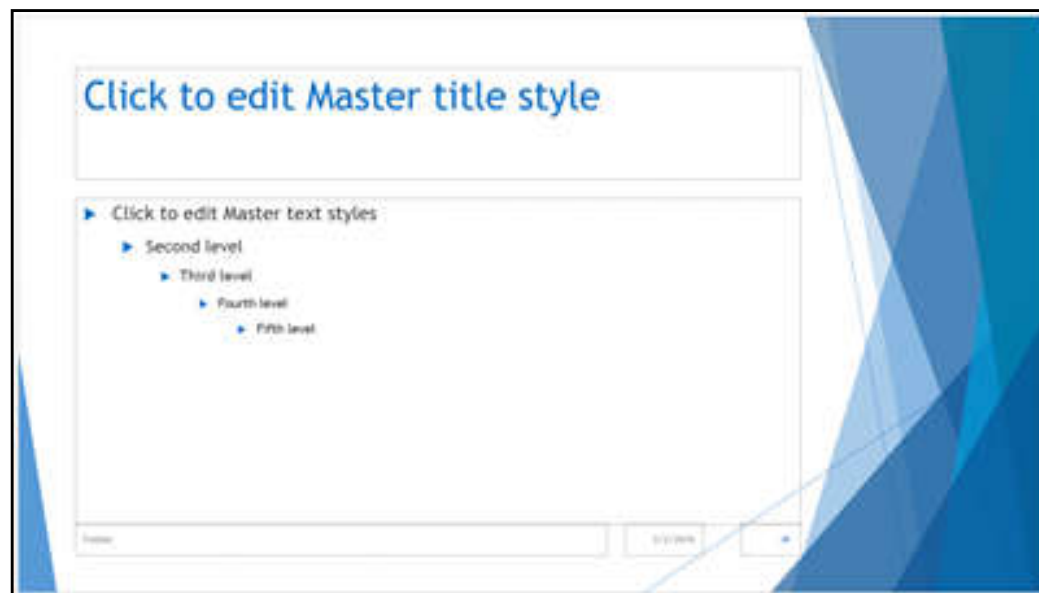
- **Use your slide effectively**
 - **fill the page, but do not overfill**
 - **Do not go more than 8 lines of text per page**

General format

- Landscape format is standard



4:3

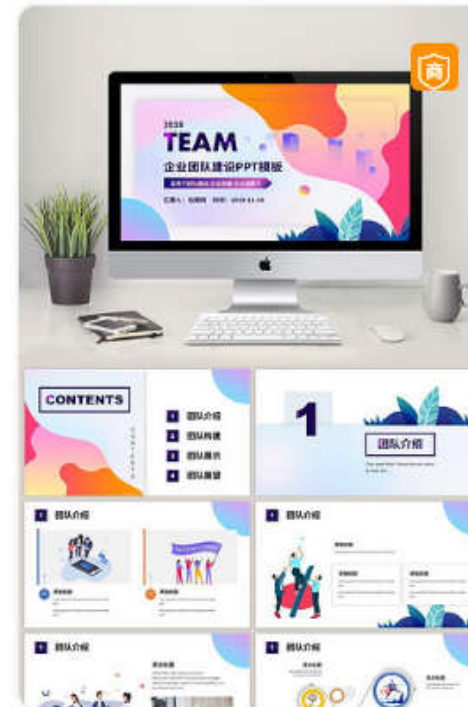


16:9

add page number →

General Format

- ***Do not use*** those 'fancy' templates online
 - You are scientists, not salesmen.



General Format

- **Do not use** those 'fancy' templates online
 - You are scientists, not salesmen.



undergraduates → master students → PhD students

General format

- **Be careful about the border of the slide**
 - **contents too close to the border may not be seen**

**Put your
contents here**

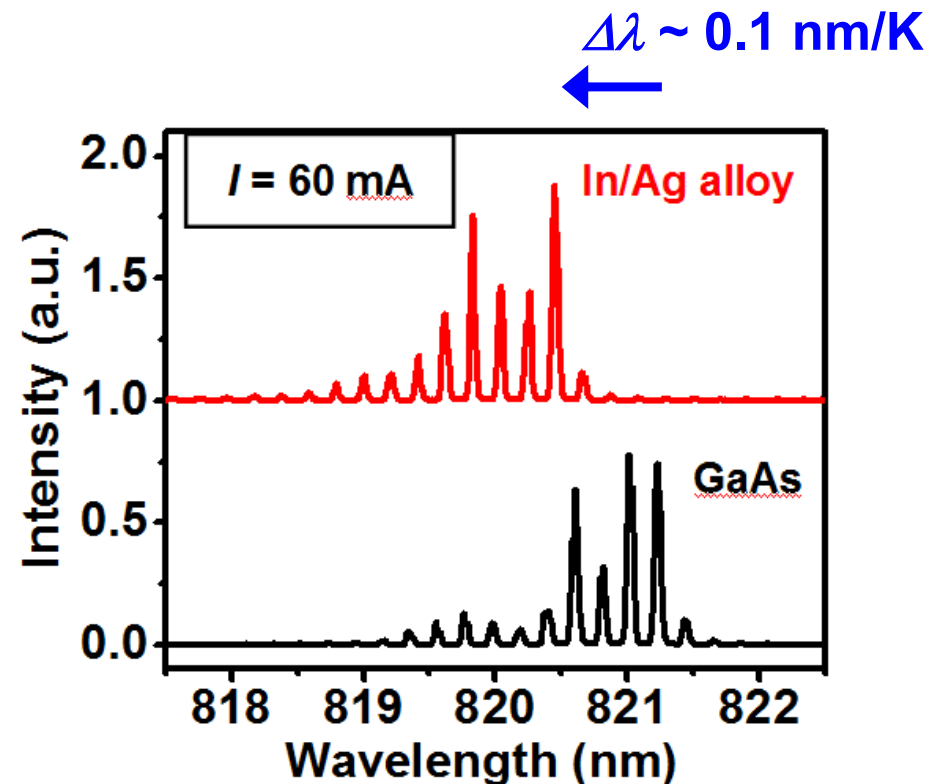
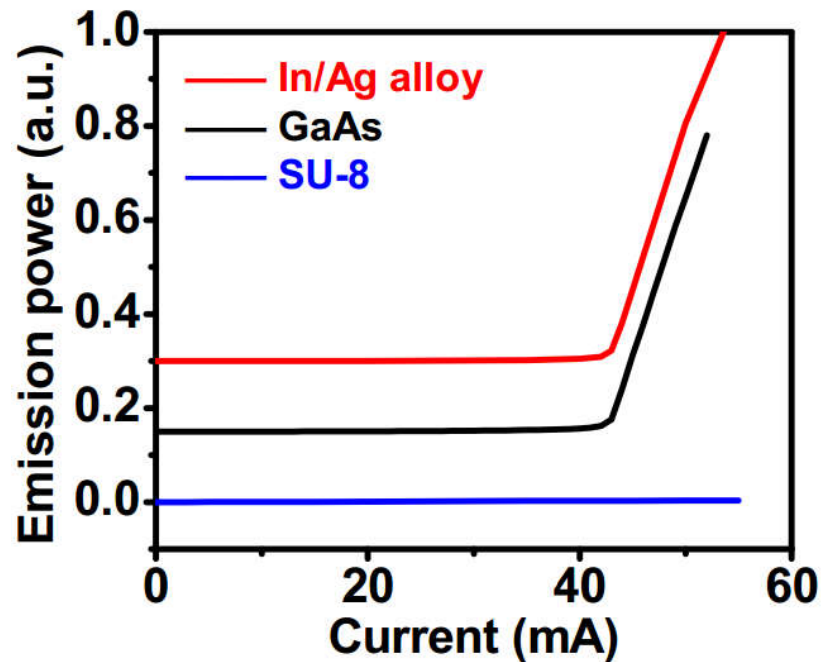
do not put anything here

do not put anything here

do not put anything here

An example slide

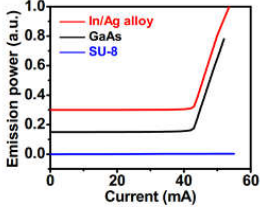
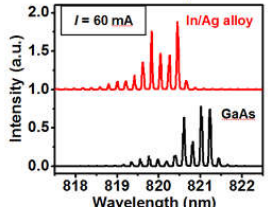
- Lasers on different substrates
 - electrical injection
 - continuous wave operation at room temperature



Other Examples

An example slide

- Lasers on different substrates
 - electrical injection
 - continuous wave operation at room temperature

18

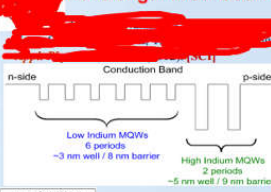


Next Week's Plan

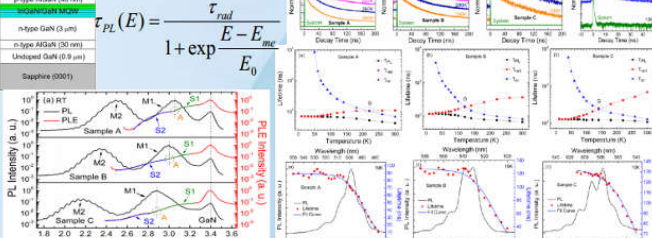
- Colormap.
- Simulate 10000 rays.



Investigation of the light emission properties and carrier dynamics in wavelength InGaN/GaN multiple-quantum well light emitting diodes



$$r_{pl}(E) = \frac{\tau_{rad}}{1 + \exp\left(\frac{E - E_0}{kT}\right)}$$





Lorem ipsum dolor amet commodo magna eros quis urna.

- Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.
- Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.
- Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Proin pharetra nonummy pede. Mauris et orci.
- Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.
- Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.
- Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Proin pharetra nonummy pede. Mauris et orci.



Background

Do use

- clean, unshaded backgrounds

Do not use

- colors with low contrast
- distracting graphs
- 'ghost' text

Microsystems Background Nanoengineer

Do use

- clean, unshaded backgrounds

Do not use

- colors with low contrast
- distracting graphs
- 'ghost' text

**Do not use pure
black/white**

**不要使用
纯黑白版式**

Font type

- Use bold fonts

This is bold



This is normal

- 使用加粗字体

这是加粗字体



这是普通字体

Font type

- Use sans-serif font (Arial), do not use serif fonts

This is Arial



This is Times New Roman

- 使用无衬线字体（黑体），不要使用有衬线字体（宋体）

这是黑体字



这是宋体字

Font type

Cognition 118 (2011) 111–115



ELSEVIER

Contents lists available at ScienceDirect

Cognition

journal homepage: www.elsevier.com/locate/COGNIT

Brief article

Fortune favors the **Bold** (*and the Italicized*): Effects of disfluency on educational outcomes

Connor Diemand-Yauman^a, Daniel M. Oppenheimer^{a,*}, Erikka B. Vaughan^b

^aPrinceton University, Department of Psychology, United States

^bIndiana University, Psychological & Brain Sciences, United States

serious scientific research ...

Font type

The logo consists of the word "Google" in a rounded, bubbly font. Each letter is a different color: G (red), o (blue), o (green), g (yellow), l (red), e (blue). The letters have a slight 3D effect with shadows.

1997-1998 (Pre-launch)

The logo is "Google" in a simple, clean sans-serif font. The colors are the same as the previous version: G (green), o (red), o (yellow), g (blue), l (red), e (green).

September-October 1998

The logo is "Google!" in a simple, clean sans-serif font. The colors are the same as the previous version: G (blue), o (red), o (yellow), g (blue), l (red), e (green), followed by an exclamation point.

September 1998-May 1999

The logo is "Google™" in a simple, clean sans-serif font. The colors are the same as the previous version: G (blue), o (red), o (yellow), g (blue), l (red), e (green), followed by a trademark symbol.

May 1999-May 2010

The logo is "Google" in a simple, clean sans-serif font. The colors are the same as the previous version: G (blue), o (red), o (yellow), g (blue), l (red), e (green).

May 2010-September 2013

The logo is "Google" in a simple, clean sans-serif font. The colors are the same as the previous version: G (blue), o (red), o (yellow), g (blue), l (red), e (green).

September 2013-September 2015

The logo is "Google" in a simple, clean sans-serif font. The colors are the same as the previous version: G (blue), o (red), o (yellow), g (blue), l (red), e (green).

September 2015-Present

Font type

Old

The old Google logo, featuring a blue 'G', red 'o', yellow 'o', green 'g', and red 'le'.

New

The new Google logo, featuring a blue 'G', red 'o', yellow 'o', green 'g', and red 'le'.

Old

The old Facebook logo, with the word 'facebook' in white lowercase letters on a blue rectangular background.

New

The new Facebook logo, with the word 'facebook' in white lowercase letters on a blue rectangular background.

before 2015

after 2015

Font size (> 32 pt for title)

- Major division > 24 pt
 - Minor divisions > 20 pt
 - never be smaller than 20 pt (except for references)
- CAPITALS ARE HARD TO READ FAST
 - it looks like you are shouting, so do not use them often
- **Do not change** font types *often*
- *Do not use Flourished Fonts*

Italic fonts

- **Emphasis**

- *This is very important part*

- **Math symbols**

- $a^2 + b^2 = c^2$

- **Book or paper title**

- Einstein's paper *On the Electrodynamics of Moving Bodies*

- **Latin phrases**

- *et al., per se, in vivo, ...*

Colors

Do

- Use clear, readable colors
 - black, red, blue, ...

Do not

- use shading
- vary colors too often
- apply bad contrast: e.g., yellow or grey on white, or black, red, green on dark backgrounds
- BE TOO FANCY

Colors - poor examples

photonics

wave

electronics

light

Use photos to replace text

- A picture is worth 1000 words

Image



Things you show

Text

Oil spill severely pollutes the oceans, generating significant environmental issues and threatening the marine ecosystems.

Things you say

Texts

- **Use bullets instead of full sentences**

Original

The advantages of using this systems are:

- It will enable researchers to limit the time needed in the laboratory**
- It will help researchers to find the data they need**
- It will permit researchers to produce more accurate results**

Texts

- Use bullets instead of full sentences

Original

The advantages of using this systems are:

- It will enable researchers to limit the time needed in the laboratory
- It will help researchers to find the data they need
- It will permit researchers to produce more accurate results

Things you say

Revised

- Advantages
 - limits lab time
 - finds relevant data
 - accurate results

Things you show

Texts

- Do not use too many levels of texts
 - a maximum of 2 levels

- Computers

- Input
 - Keyboard, mouse, ...
- Output
 - Display, sound, ...



- Computers

- Input: keyboard, mouse, ...
- Output: display, sound, ...



Grammar & Spelling

- ***Check your grammar***
 - **errors affect people's impression on your research!**

Iran Foreign Policy

Importance of role of control systems

Features of Brain-Machine Interface

Grammar & Spelling

- ***Check your grammar***
 - **errors affect people's impression on your research!**

Iran Foreign Policy

→ **Iran's Foreign Policy**
The Foreign Policy of Iran

Importance of role of control systems

→ **The importance of the role of control systems**

Features of Brain-Machine Interface

→ **Features of a/the Brain-Machine Interface**
Features of Brain-Machine Interfaces

Grammar & Spelling

- **Check your spelling**
 - errors affect people's impression on your research!

• Aoccdrnig to a rscheearch at Cmabrigde Uinervtisy, it deosn't mttar in waht oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht the frist and lsat ltteer be at the rghit pclae.

研究表明，汉字的序顺并不
定一能影响阅读，比如当你
看完这句话后，才发现这里
的字全是都乱的。

Grammar & Spelling

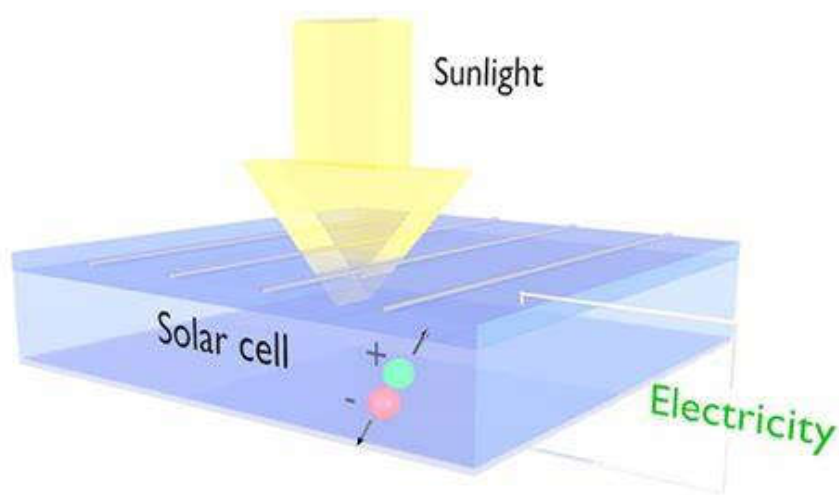
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• Accdrnig to a rscheearch at Cmabrigde Uinervtisy, it deosn't mttar in wair oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht the frist and lsat ltter be at the rghit pclae.

研究表明，汉字的序顺并不
定一能影响阅读，比如当你
看完这句话后，才发现这里
的字全是都乱的。

Animations

- Just use simple animations



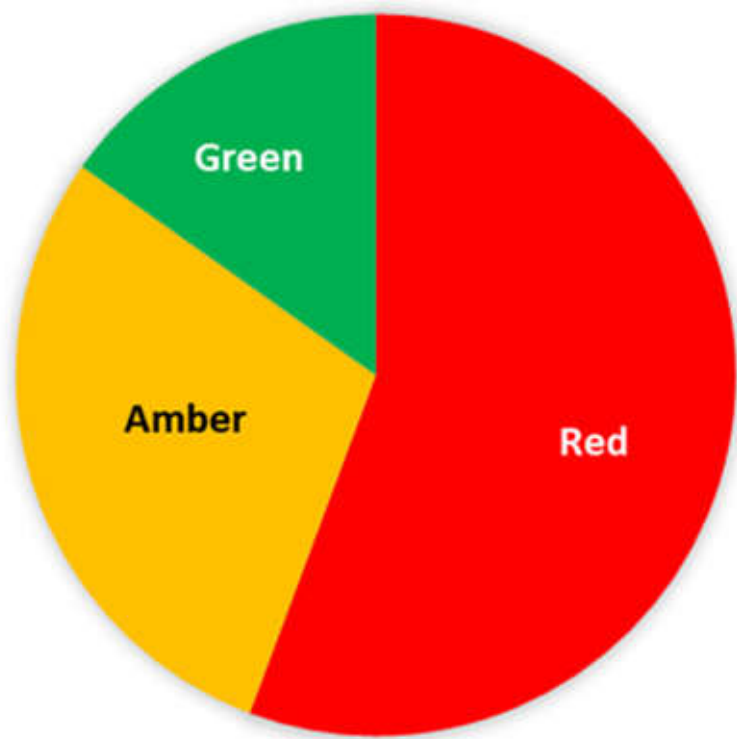
Data

- Large tables are not very useful
 - limit to less than 4*4 if possible

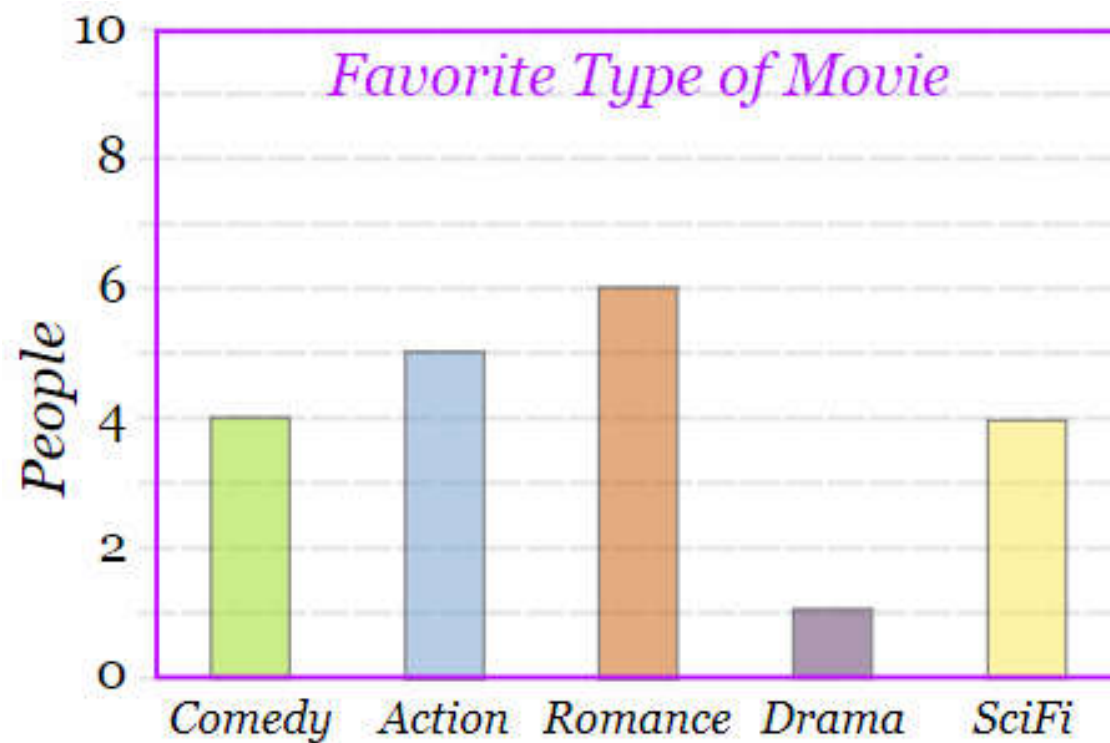
0.6	2313	0.3	4.06	1315	03.466	1312
1690	910.4	.05644	53.4	12.8	.0649	130
1313	6813	73	46.8	564	313.4	313
451	812	784	312	612	0.84	4.48
38	852	28	24.7	7	1233	763
028	83	7313	10.8	810.8	4113	861
730	138	6130	1845	468	30.7	8413

Data

- Graphically show your data



Pie chart



Bar chart

Graphs

- **Adjust the graph using Photoshop and PowerPoint**



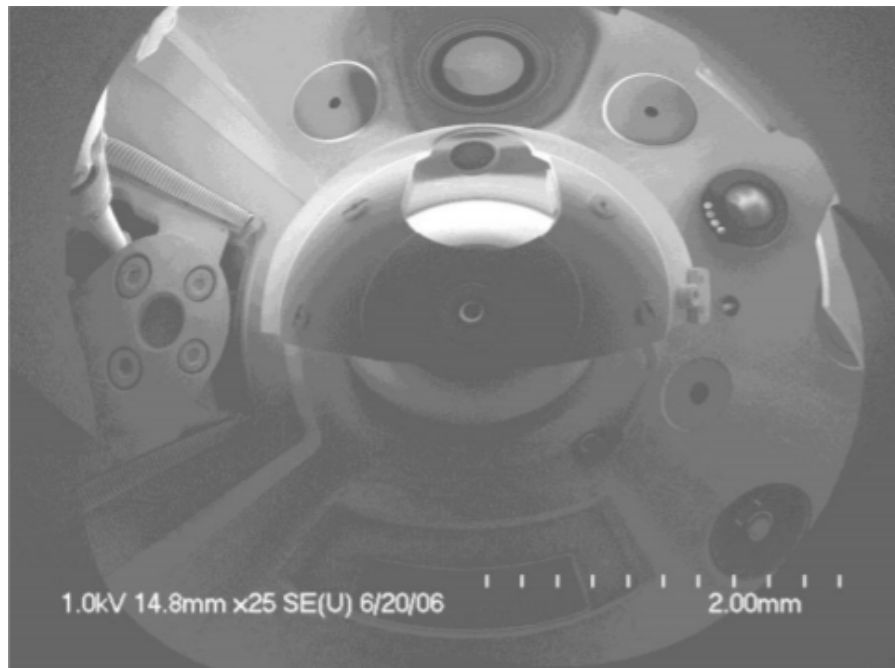
Graphs

- Adjust the graph using Photoshop and PowerPoint
 - adjust the contrast and brightness



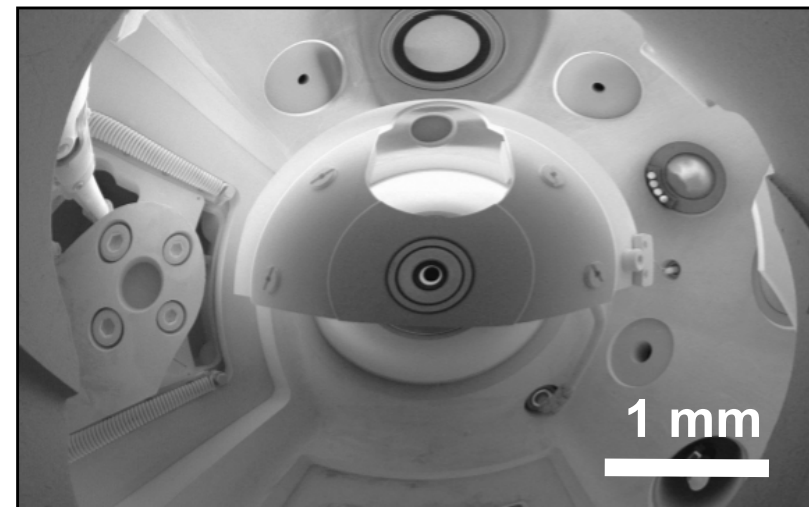
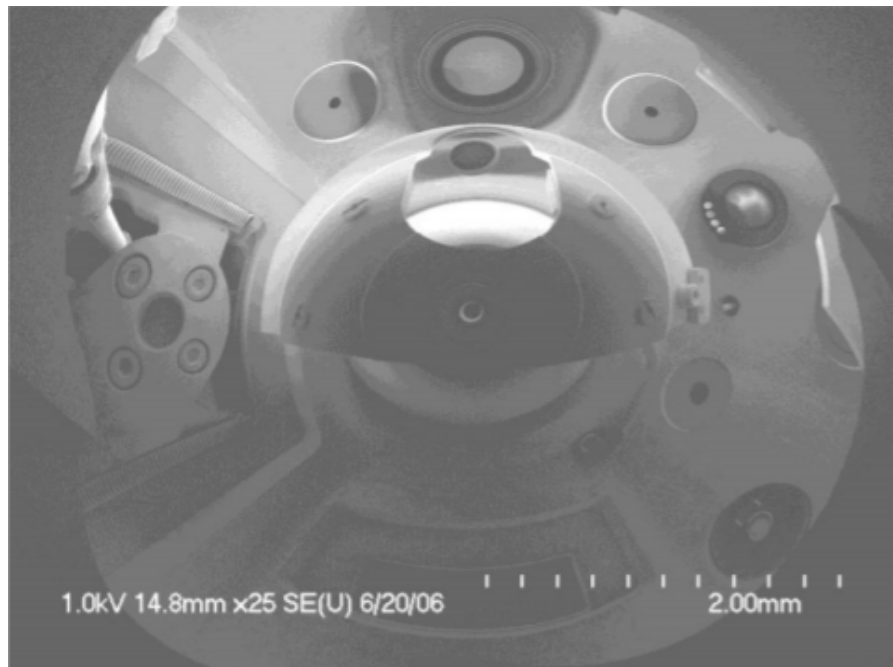
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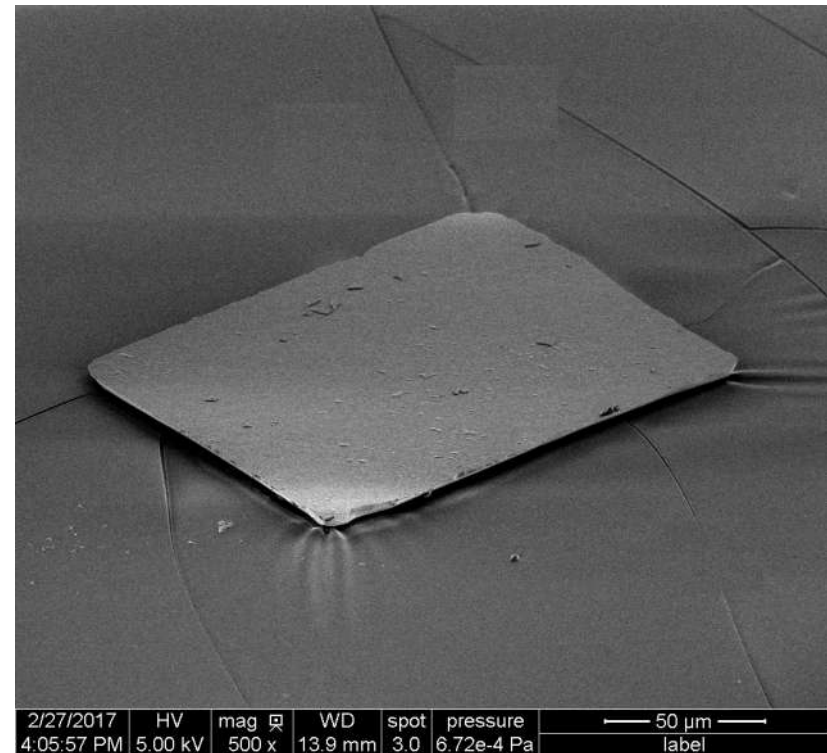
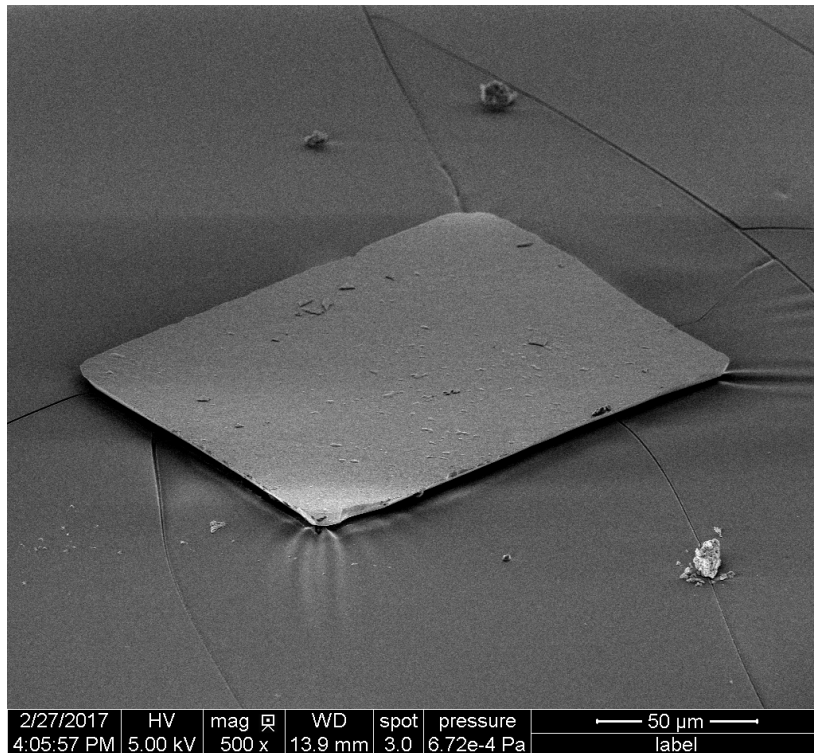
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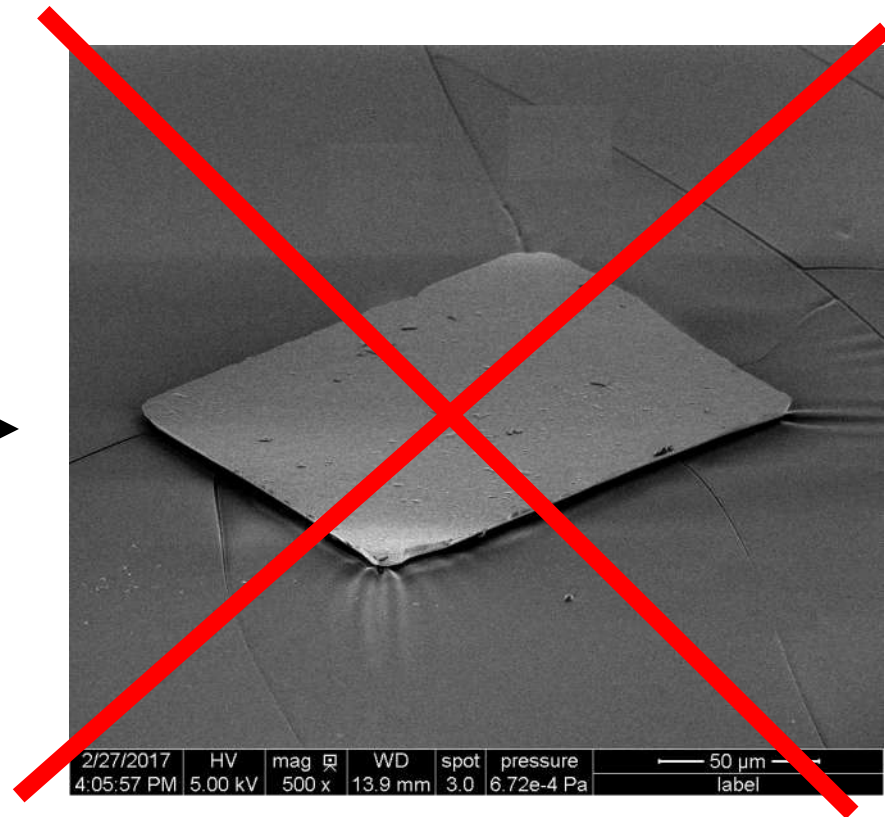
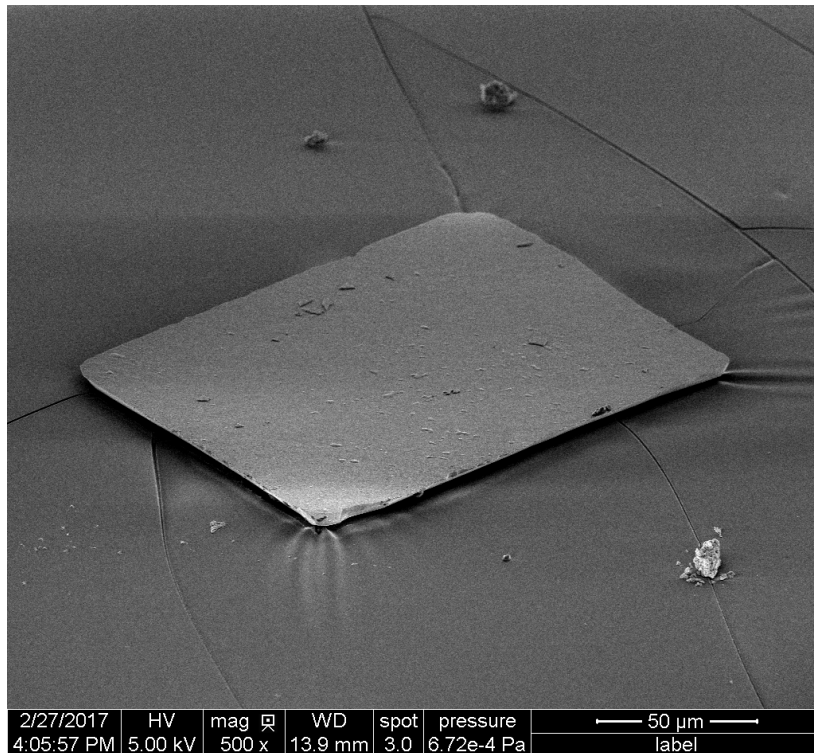
Graphs

- ***NO manipulation***



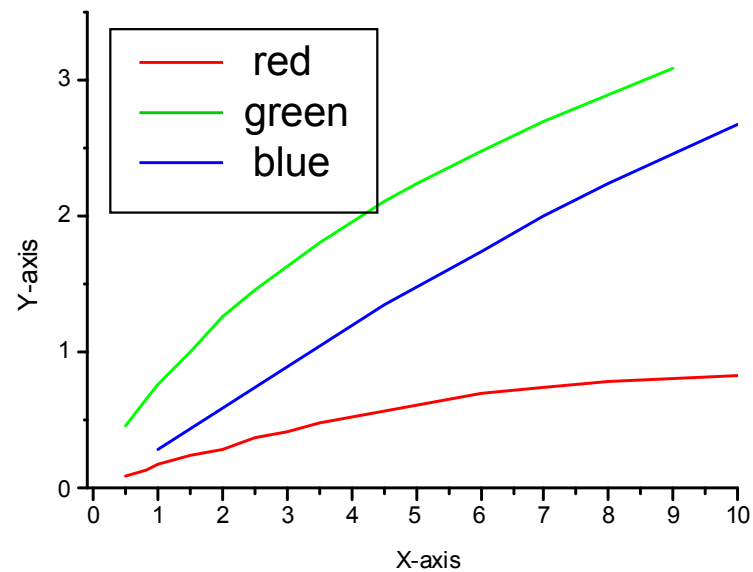
Graphs

- ***NO manipulation***



Data Plots

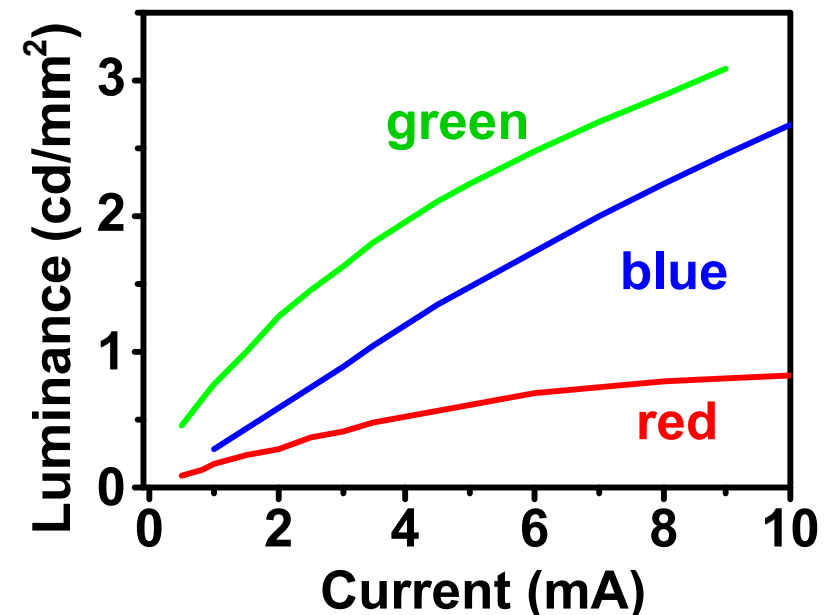
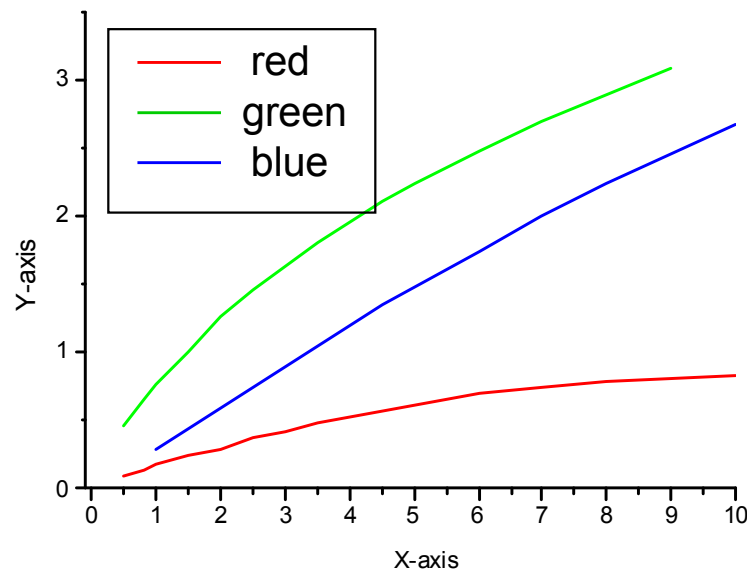
- Adjust the data plot



Data Plots

■ Adjust the data plot

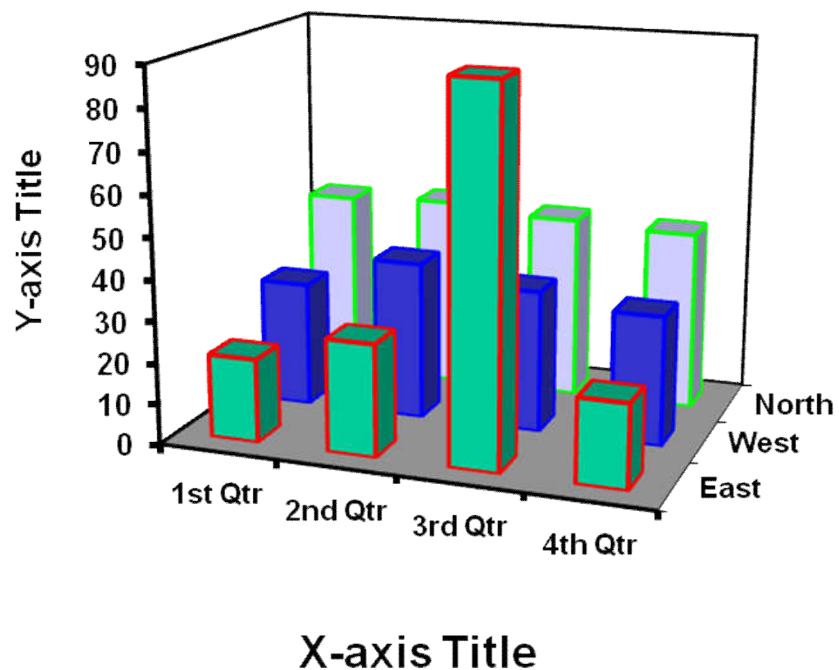
- provide correct variables and units
- use proper bold font sizes
- use thicker lines and strong colors
- avoid “key boxes” when possible



Add a conclusion statement below: ***Give the Bottom Line.*** 74

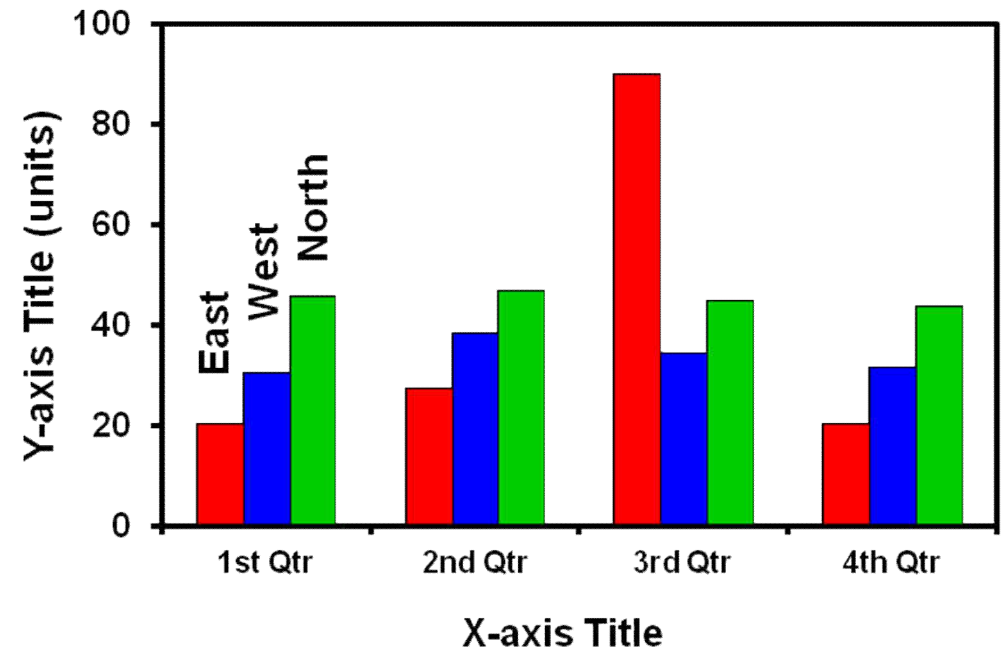
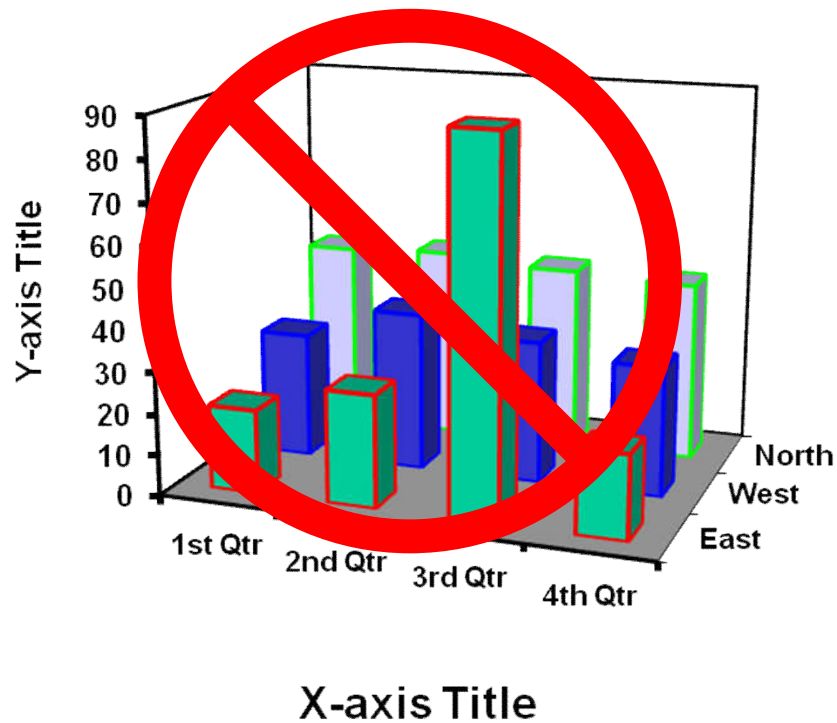
Data Plots

- Be careful about 3D graphs



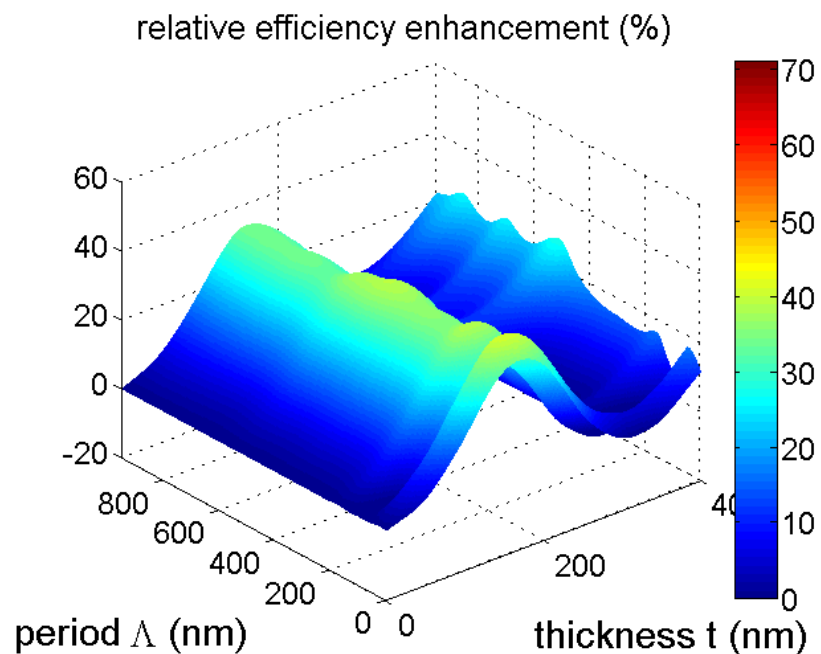
Data Plots

- Be careful about 3D graphs



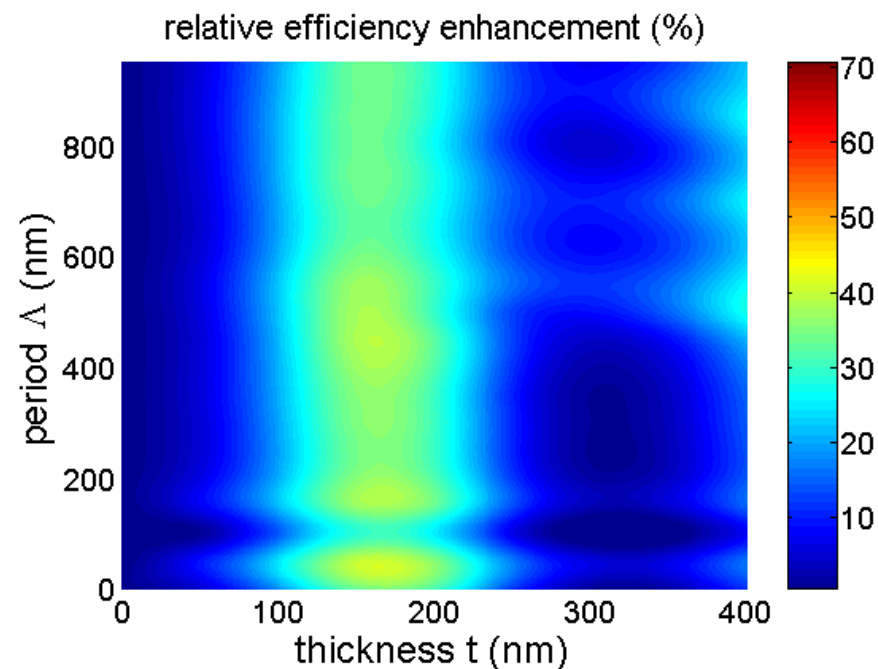
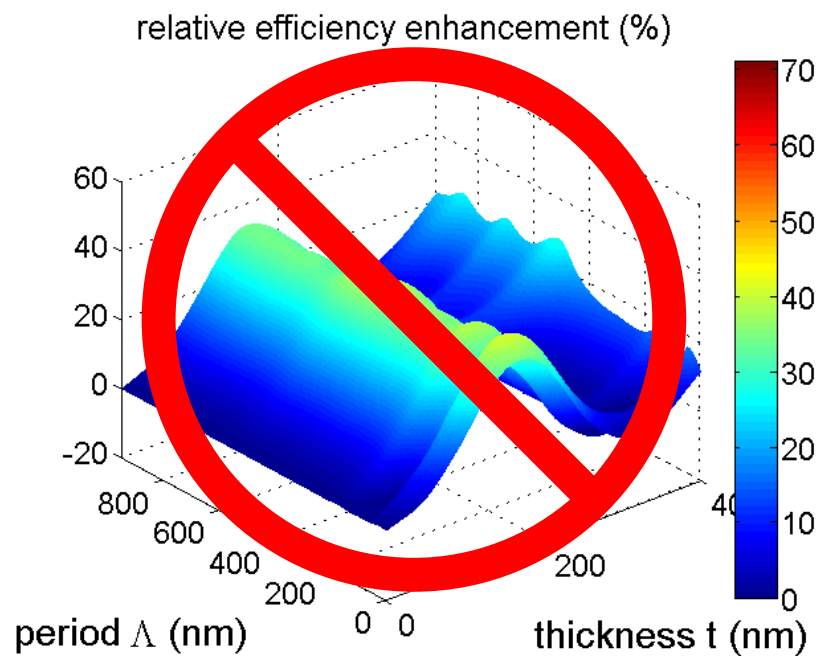
Data Plots

- Be careful about 3D graphs



Data Plots

- Be careful about 3D graphs

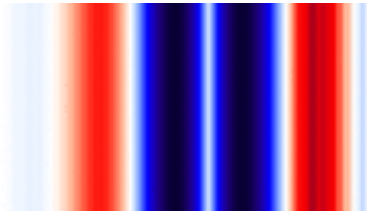


Movies

- ***Be careful about embedded movies***
 - 50% of them do not work, based on my observations
 - You need to be a real computer expert to use them
- **Always back up your video files**
- **GIF format animations usually work better**

Movies

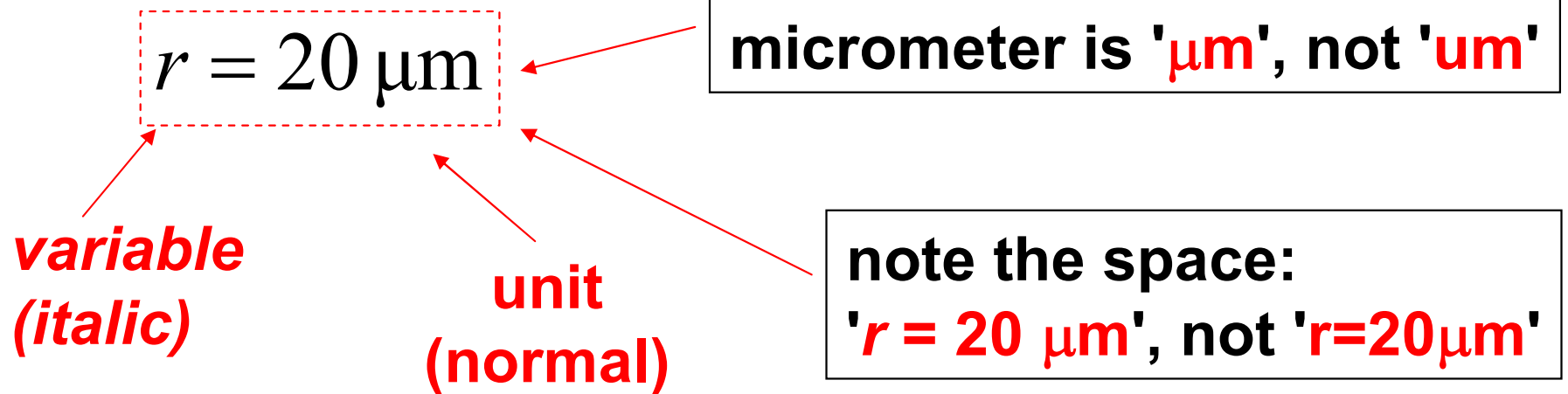
- ***Be careful about embedded movies***
 - 50% of them do not work, based on my observations
 - You need to be a real computer expert to use them
- **Always back up your video files**
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Special symbols

■ Math types

- use equation editors



■ Greek symbols

- 'symbol' font in MSWord
- abcdef ... -> $\alpha\beta\chi\delta\epsilon\phi$...

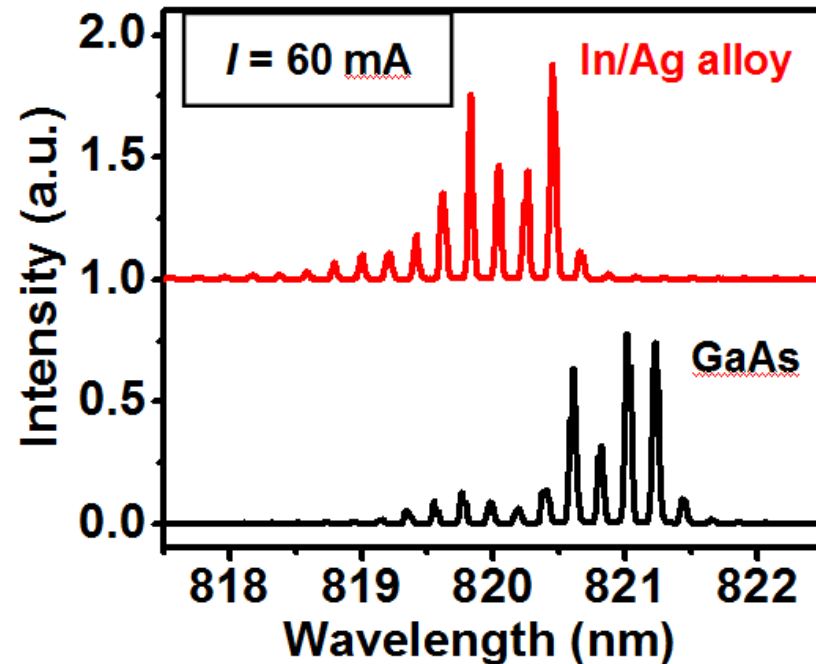
Special symbols

- -, –, —, —
 - - hyphen solid-state physics
 - – minus $x - y = z$
 - – en dash Albert Einstein (1879–1955), page 1–5
 - — em dash Albert Einstein—a great scientist

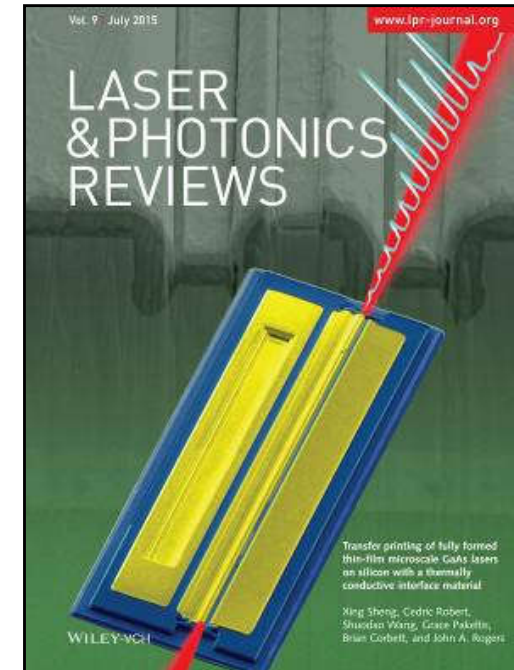
- do not confuse English and Chinese characters
 - 电子, 光子。
 - electrons, photons.

References

- Always provide the reference for someone else's data
- Provide the reference for your own work (if published)
- Smaller fonts are OK (> 12 pt)



X. Sheng, *et al.*, *Laser & Photon. Rev.* **9**, L17 (2015)



If you have a cover, show it

Write down your speech

- **Revise the phrases**
- **Delete redundancy**
- **Know the timing**
- **Identify the transitions**
- **Practice pronunciation of difficult words**
- **Use it for future talks**

Write down your speech

- Use short sentences

Results show XXXX, which is important and ...

→ Results show XXX. This is important. ...

- Use more active verbs than passive ones

Results are measured by using XXX ...

→ We measured the results using ...

- Use more verbs rather than nouns

Evaluation results indicate that ...

→ We evaluate the results and show that ...

'We' or 'I' ?

- Always say 'we', not 'I'
 - except for self-introduction

We have done ...

We show ...

We plan to ...

Example 1

Original

The scenario is a typical wireless network, in which there is a single base station and subscriber stations around it. We used a simulator in order to understand how the power-saving mechanism influences the performance of the users in addition to calculating what affect it has on the environment.

Example 1

Original

The scenario is a typical wireless network, **in which** there is a single base station and subscriber stations around it. We used a simulator **in order to** understand how the power-saving mechanism influences the performance of the users **in addition to** calculating what affect it has on the environment.

Revised

The scenario is a typical wireless network. **There** is a single base station and subscriber stations around it. We used a simulator **to help us** understand two factors. **First**, how the power-saving mechanism influences users' performance. **Second**, the effect that power saving has on the environment.

Example 1

Revised

Use shorter sentences

The scenario is a typical wireless network. **There** is a single base station and subscriber stations around it. We used a simulator **to help us** understand two factors. **First**, how the power-saving mechanism influences users' performance. **Second**, the effect that power saving has on the environment.

Example 2

Original

The aim of this research project is to evaluate the role of planning and control systems in organizations among health care trusts with an aim to mitigate shortcomings due to competition. Besides, this study aims to look into the effects generated by these systems.

Example 2

Original

The aim of this research project is to evaluate the role of planning and control systems in organizations among health care trusts with **an aim** to mitigate shortcomings due to competition. Besides, this study **aims to** look into the effects generated by these systems.

Revised

Our aim is to evaluate the role of planning and control systems in organizations among health care trusts **in order to** mitigate shortcomings due to competition. **Secondly, we also want to** look into the effects generated by these systems.

Example 2

Revised

Remove repetitive phrases

Our aim is to evaluate the role of planning and control systems in organizations among health care trusts **in order to** mitigate shortcomings due to competition. **Secondly, we also want to** look into the effects generated by these systems.

Example 3

Testing can be considered an activity that is time consuming ...

The main goal of our research as already shown in the previous slides is to find new methods ...

Another thing we wanted to do was ...

In this picture I will show you a sample ...

Example 3

Testing ~~can be considered an activity that~~ is time consuming ...

The main goal of our research ~~as already shown in the previous slides~~ is to find new methods ...

Another thing we wanted to do was ...

→ We also wanted to do ...

In this picture I will show you a sample ...

→ Here is a sample ...

Be concise

Example 4

Original

The application of the optimized procedure to the samples allows their complete functionalities and the detection of the main components with quite good detection limits. The sample characterization is performed using PEX-VEC.

Example 4

Original

The **application** of the optimized procedure to the samples **allows** their complete **functionalities** and the **detection** of the main components with quite good detection limits. The sample **characterization is performed** using PEX-VEC ...

Revised

When **we apply** the optimized procedure to the samples, we manage to completely **functionalize** them. And we are able to **detect** the main components with quite good limits. **We characterize** the sample using PEX-VEC ...

Example 4

Revised

- Use shorter sentences
- Use more active verbs than passive ones
- Use verbs rather than nouns

When **we apply** the optimized procedure to the samples, we manage to completely **functionalize** them. And we are able to **detect** the main components with quite good limits. **We characterize** the sample using PEX-VEC ...

Emphasize the key words

- **Speed**
 - **slow down**
- **Volume**
 - **be loud**
- **Pitch**
 - **use high sound**
- **Tone**
 - **vary your pitch**

Practice:

This is ***very important***

Be loud



- **As a speaker, you always overestimate your voice**
- **As audience, you always underestimate your noise**

Emphasize the key words

- ***Please*** present your paper next week.
- Please ***present*** your paper next week.
- Please present ***your*** paper next week.
- Please present your ***paper*** next week.
- Please present your paper ***next*** week.
- Please present your paper next ***week***.

Getting the audience's attention

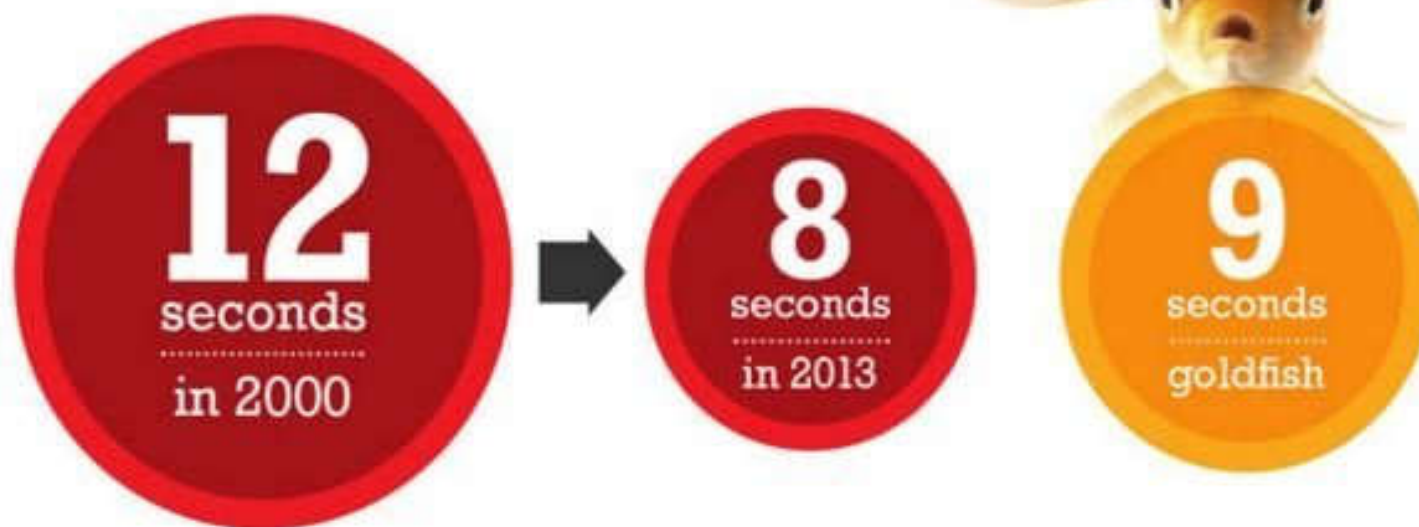
- **We become slaves of laptops, cellphones, ...**



Getting the audience's attention

- We become slaves of laptops, cellphones, ...

The average human
attention span



How about in 2021 ??

Getting the audience's attention

- Average lengths for online videos



~ 5 mins



~ 1 min



~ 15 sec

Getting the audience's attention

Regain their attention

- **Blank the screen**
- **Write down something on the board**
- **Ask questions**
- **Show an interesting slide/photo/video**

Calm your Nerves

- Everyone gets nervous
- Have enough time to prepare the talk
- Practice it many many times
- **Think of yourself as a teacher educating students, not a student being examined**

Practice, practice, practice!

- Practice for at least 10–20 times
 - in walk, on the plane, at bed ...
- Write down important messages
- Practice in front of others
 - your friends, colleagues, partners, ...
- Practice the **correct pronunciation** of key words

Practice, practice, practice!

- **Vary the parts you practice**
- **Stand and move. Do not sit**
- **Use your hands and gestures**
- **Practice your smiling**
- **Keep improving your slides after your presentation!**

Presentation

- **Know your room**
 - stand in the back to check your slides
- **Arrive 10 minutes earlier**
- **Bring a laser pointer**
 - green is the best, red is OK, no infrared!
- **Always put your **audience** first, not yourself**
- **Only worry about the **science**, not your English!**

Presentation

- Test your slides and laptops with the projector
- Prepare adapters for your laptop



VGA



HDMI



mini-DP



type C

- Back up your slides
 - send a copy to your email
 - save a copy in a USB drive

Presentation

- **Be very careful about telling jokes**
 - **Many scientists do not have senses of humor**
 - **People are from different countries / cultures**
 - **Do not offend other races / cultures / countries**
 - **Jokes from the big boss always get more laughter**

- **Be loud, and slow down**

- **Speak to the audience, not the screen**

- **Keep eye contact with everyone, not someone**

What do people **want to see?**

- a **professional, credible and confident** talk
- a **friendly and enthusiastic** speaker
- **clear, helpful and informative** contents
- **interesting, curious and counterintuitive** things
- **with entertainment and interactions**

What do people *not* want to see?

- Unpracticed talk
- no background / introduction / conclusions
- no interests
- read or recite what is in your notebook
- no interactions
- too technical, too detailed

What do people *not* want to see?

- Too fast
- Too long
- Monotone: bla bla bla ...
- Read your slides
- Pet phrases: *'OK', 'you know', 'ummm', 'sooo', ...*



What do people *not* want to see?

- Do not say *negative things*:

"Sorry, I did not prepare it well ..."

"I am too busy to prepare it ..."

"I am very tired ..."

*"I do not know if you can read this,
but I will read it for you ..."*

Pessimism can be as contagious as a disease

Acknowledgements

- Thank others
- Thank your sponsors
- Let your audience know when you are done
- End with:
 "Finally, thank you for your attention"

Questions & Answers

Last but not the least ...

- People use them as exams
- Establish new collaborations
- Point out new research directions

Questions & Answers

- **Prepare for some common questions**
 - **What are the most significant findings?**
 - **What are the biggest challenges?**
 - **What will be future directions?**
 - **...**

- **Collect questions from colleagues / advisors / collaborators / reviewers ...**

- **Prepare some backup slides for details**
 - **data sheet, experiment procedures, ...**

Questions & Answers

- **Prepare for difficult questions and difficult people**
- **Calm down and be polite**
- **Pause for 2–3 seconds before answering**
- **Repeat the question if not very clear**
- **Say something more than 'I do not know ...'**
- **Record good questions and answer them later**

Questions & Answers

- **Situation 1**
 - **People ask questions, and you answered them correctly**
 - **Good!**

- **Situation 2**
 - **People ask questions, and you answered them incorrectly**
 - **Bad, but OK**

- **Situation 3**
 - **People ask questions, and you say nothing but 'I do not know'**
 - **Worse**

- **Situation 4**
 - **Nobody asks questions**
 - **Worst!**

Being a Good Audience Member

Respect the speaker

- Arrive on time
- Silence your cellphone
- Show your interests and attentions
- No talking or answering phones (go outside)
- No photos!
- Ask good questions
- Applaud when finished



Outline

- **Why to do presentations?**
- **How to give a PowerPoint presentation?**
 - **how to prepare your slides**
 - **how to present your talk**
- **How to give a Poster presentation?**

Thank you for your attention