

# Presenting your work - TikZ & Tricks

MICHAŁ SKRZYPCZAK



UNIVERSITY  
OF WARSAW

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[ Disclaimer: I'm not an expert... ]



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# Part I: Content

# Narrative

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i.e.

Mountain hiking **or** roaming swamps?

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**“Cathedral Building”** (paraphrasing Filip Murlak)



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Cathedral  $\rightsquigarrow$  Arc  $\rightsquigarrow$  Stone  $\rightsquigarrow$  Quarry

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Dychotomy: SIMPLE vs. HARD

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**Hint:** you may skip some minor results !

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## “Border Tracing”

Dychotomy: SIMPLE vs. HARD

**Hint:** you may skip some minor results !

**Avoid:** “table filling”, “lemmata listing”, ... or at least use a **diagram**...



# Less is better

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or

what can you learn from  $n$ 'th talk during a day

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**“Take-home message”** (attributed to Jacques Duparc)

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You are an expert!

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**You are an expert!**

2 years of studying **X**  $\implies$  one of the world's top 10 experts of **X**

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**You are an expert!**

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No need for **complete proofs**

it's not your duty to convince them that you know how to do it !!!

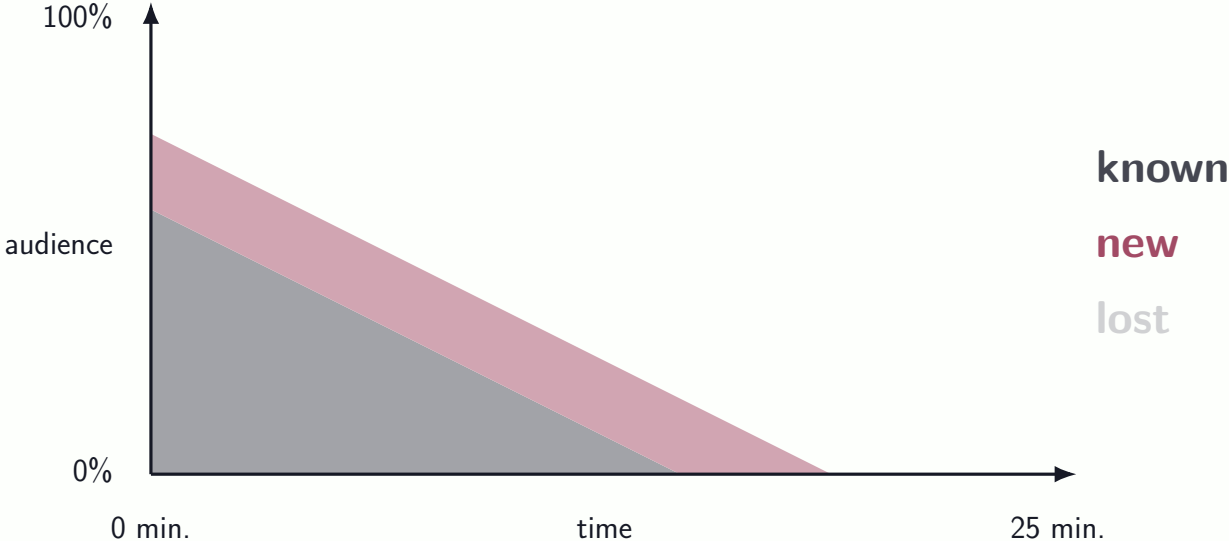
**There will be casualties**



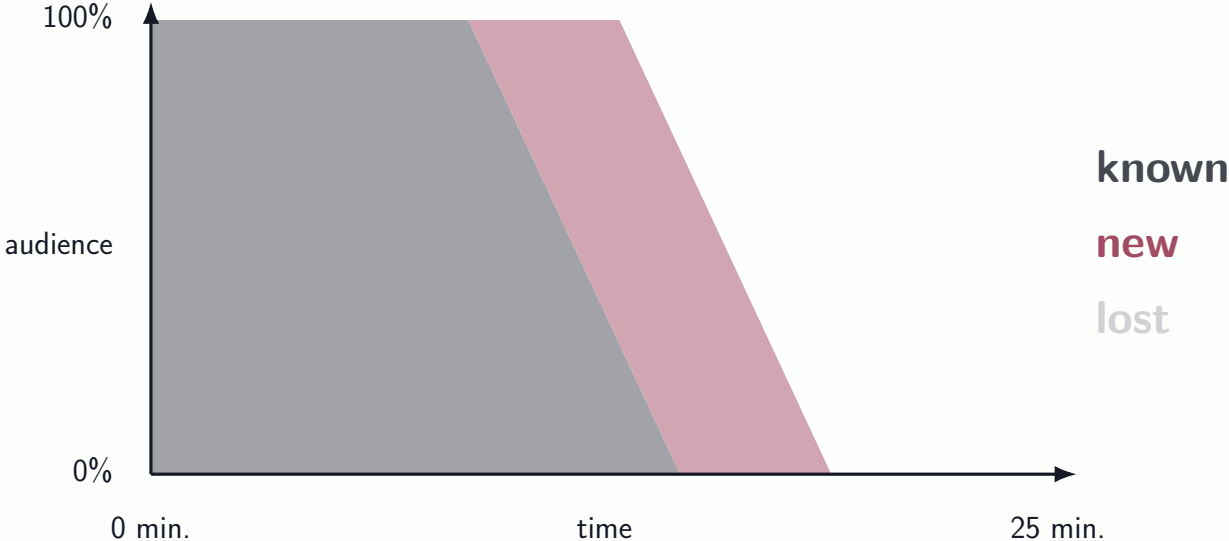
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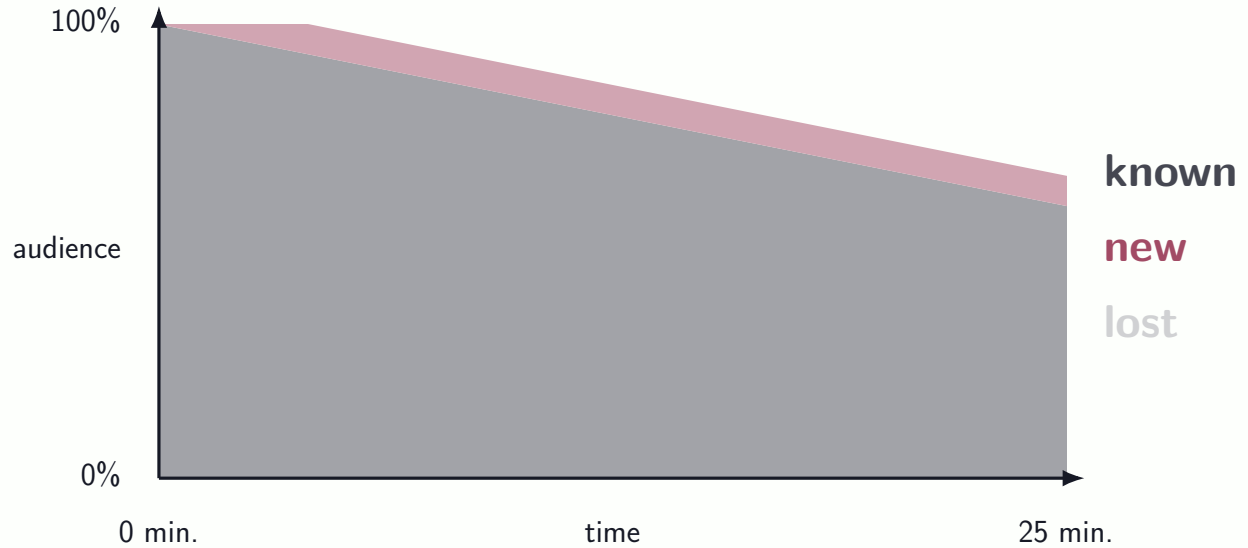
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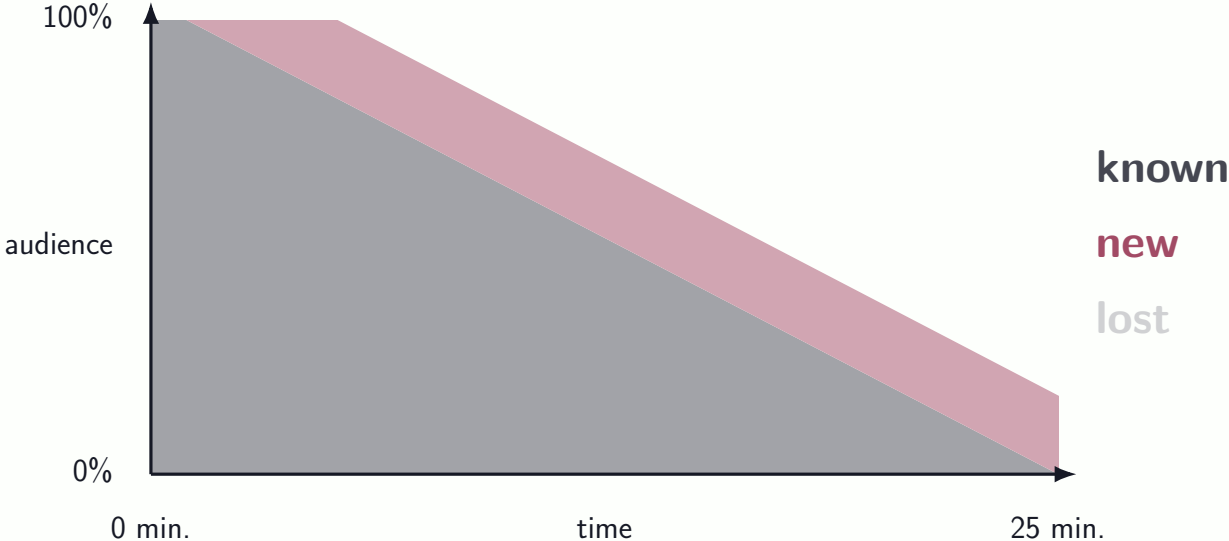
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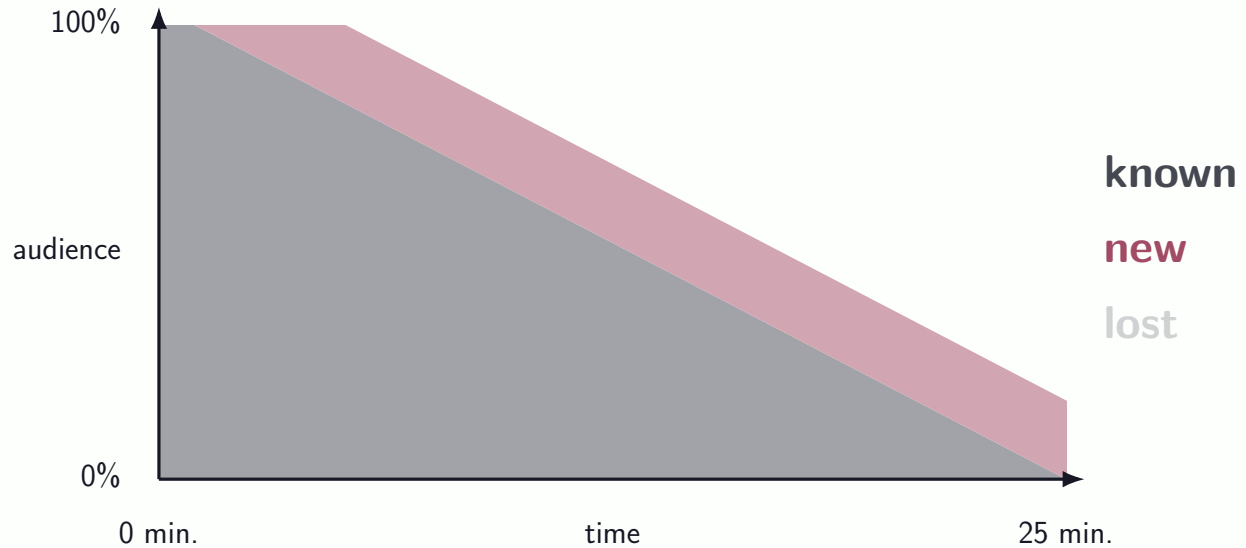
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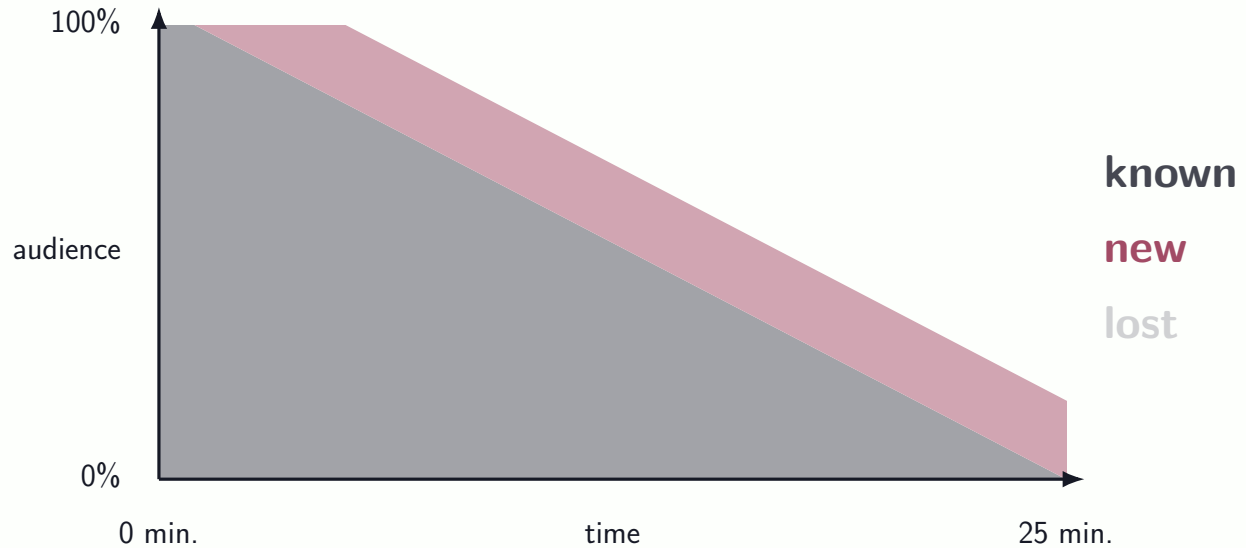


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Think of **Placeholder Attendees**

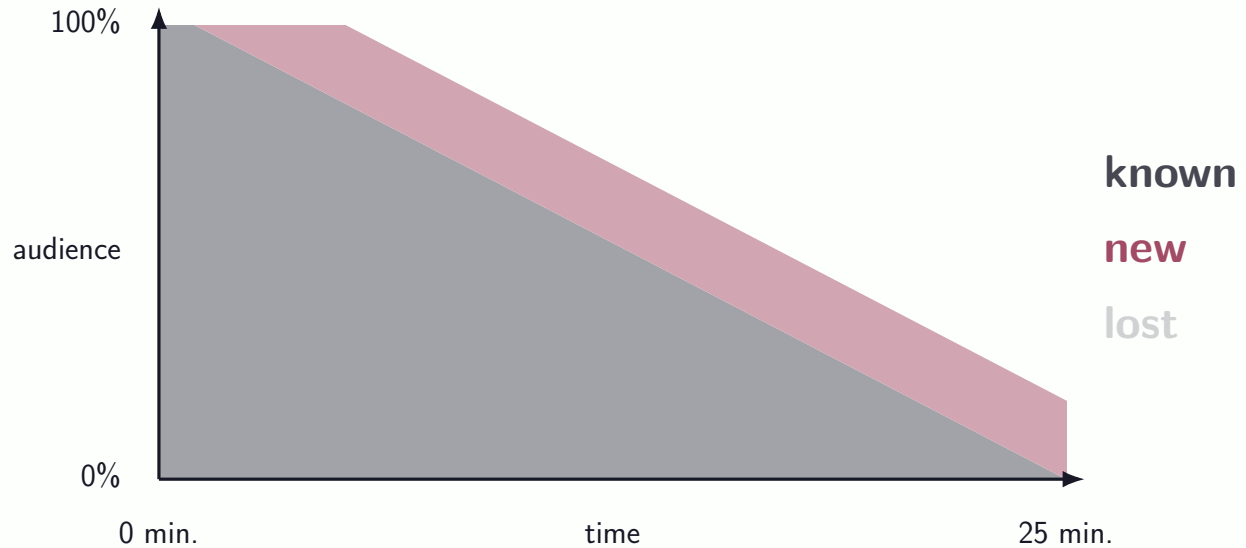
## There will be casualties



Think of **Placeholder Attendees**

Plan **Points of Recovery**

## There will be casualties



Think of **Placeholder Attendees**

Plan **Points of Recovery**

Be careful with **Bermuda Definitions**



## Part II: Framework

# Axioms

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- ▶ Interactive and vivid

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**Landscape PDFs**



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e.g. **Flides**

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visual TOC, HTML5 features

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laborious programming

# Framework choice guidelines



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## Attention by suspension

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 show your content gradually, add/change pieces

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→ few content, well organised in space

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→ expose formulae and diagrams that are appealing



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## Single picture » paragraph of text

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## Allure of mathematics

→ expose formulae and diagrams that are appealing

## Single picture » paragraph of text

→ try to represent ideas graphically

## Part III: Form

# Pictures!

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**Speaker's obligation:** draw all that should be drawn

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**Clickers** (WYSIWIG)

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TikZ, X<sub>y</sub>-pic, SVG, ...



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Illustrator, Inkscape, GIMP, ...

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TikZ, Xypic, SVG, ...

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– time consuming iterations, entry cost

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# Simplifications

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- ▶ ... with a standard semantics...
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**But:** if you decide not to go into details then **don't!** :)

# Bibliography

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$$\mathbb{P} \left( \text{an author of a related work is in the audience } \Gamma \right) \xrightarrow[|\Gamma| \rightarrow \infty]{} 1$$



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- ▶ no one **knows** what is [BS13] (nor [2]. . .)

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- ▶ Rabin [1962];
- ▶ Julius R. Büchi [1960];
- ▶ Kupferman, Vardi ICALP'03;
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- ▶ . . .

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- ▶ ...

**years** are **important**



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AKA

something more than **black** & **white** + **RGB**

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Background  $\neq$  white

$\langle 253, 255, 252 \rangle$

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Background	≠ white	⟨253, 255, 252⟩
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Highlight	≠ red	⟨139, 30, 63⟩

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**But:**

- ▶ **Consistency!**



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- ▶ **HSV model**

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Text	≠ black	⟨22, 25, 37⟩
Highlight	≠ red	⟨139, 30, 63⟩
...		

**But:**

- ▶ **Consistency!**

- ▶ **Palettes:**

E.g. <https://colors.co/>

Or: <https://www.sessions.edu/color-calculator/>

- ▶ **HSV model**

**Hint:** you may use conference's palette !

## Part IV: Miscellanea

# Important details

## Important details

- ▶ **Alignment**

## Important details

### ▶ Alignment

a) ...

b) ...

c) ...



## Important details

- ▶ **Alignment**

## Important details

- ▶ **Alignment**
- ▶ **Next slide:** “This leads to the notion of. . . No, sorry, before that. . .”

## Important details

- ▶ **Alignment**

- ▶ **Next slide:** “This leads to the notion of... No, sorry, before that...”

→ practice ∨ refrain ∨ use software

## Important details

- ▶ **Alignment**
- ▶ **Next slide:** “This leads to the notion of. . . No, sorry, before that. . .”
  - ↳ practice ∨ refrain ∨ use software
- ▶ **Laser pointer** ≡ **Mouse Chaising Hypnosis**

## Important details

- ▶ **Alignment**

- ▶ **Next slide:** “This leads to the notion of... No, sorry, before that...”

→ practice ∨ refrain ∨ use software

- ▶ **Laser pointer** ≡ **Mouse Chaising Hypnosis**

→ use for <10% of time



## Important details

- ▶ **Alignment**

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→ practice ∨ refrain ∨ use software

- ▶ **Laser pointer** ≡ **Mouse Chaising Hypnosis**

→ use for <10% of time

- ▶ **Microphone** ≡ **Focus Enforcer**

→ use for =100% of time

## Important details

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- ▶ **Microphone** ≡ **Focus Enforcer**

→ use for =100% of time

- ▶ **Stress**



## Important details

- ▶ **Alignment**

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→ use for <10% of time

- ▶ **Microphone** ≡ **Focus Enforcer**

→ use for =100% of time

- ▶ **Stress**

→ use for =0% of time

## Important details

- ▶ **Alignment**

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→ practice ∨ refrain ∨ use software

- ▶ **Laser pointer** ≡ **Mouse Chaising Hypnosis**

→ use for <10% of time

- ▶ **Microphone** ≡ **Focus Enforcer**

→ use for =100% of time

- ▶ **Stress**

→ use for =0% of time

- ▶ **Timing**

## Important details

- ▶ **Alignment**

- ▶ **Next slide:** “This leads to the notion of... No, sorry, before that...”

→ practice ∨ refrain ∨ use software

- ▶ **Laser pointer** ≡ **Mouse Chaising Hypnosis**

→ use for <10% of time

- ▶ **Microphone** ≡ **Focus Enforcer**

→ use for =100% of time

- ▶ **Stress**

→ use for =0% of time

- ▶ **Timing**

→ prepare **Pre-final Slides**

## Important details

- ▶ **Alignment**

- ▶ **Next slide:** “This leads to the notion of... No, sorry, before that...”

→ practice ∨ refrain ∨ use software

- ▶ **Laser pointer** ≡ **Mouse Chaising Hypnosis**

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- ▶ **Stress**

→ use for =0% of time

- ▶ **Timing**

→ prepare **Pre-final Slides**  
+ **Practice**

## Important details

- ▶ **Alignment**

- ▶ **Next slide:** “This leads to the notion of... No, sorry, before that...”

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- ▶ **Laser pointer** ≡ **Mouse Chaising Hypnosis**

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→ use for =100% of time

- ▶ **Stress**

→ use for =0% of time

- ▶ **Timing**

→ prepare **Pre-final Slides**

+ **Practice**

+ be **Sloooow**

## Important details

- ▶ **Alignment**

- ▶ **Next slide:** “This leads to the notion of... No, sorry, before that...”

→ practice ∨ refrain ∨ use software

- ▶ **Laser pointer** ≡ **Mouse Chaising Hypnosis**

→ use for <10% of time

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→ use for =100% of time

- ▶ **Stress**

→ use for =0% of time

- ▶ **Timing**

→ prepare **Pre-final Slides**

+ **Practice**

+ be **Sloooow**

- ▶ **No reading!**

**Last slide**

## Last slide

Two moments of  $\sim 100\%$  **attention**:



## Last slide

Two moments of  $\sim 100\%$  **attention**:

1. **Chair**: “The next speaker is. . .”

## Last slide

Two moments of  $\sim 100\%$  **attention**:

1. **Chair**: “The next speaker is. . .”
2. **Chair**: “Are there any questions?”

## Last slide

Two moments of ~100% **attention**:

1. **Chair**: “The next speaker is. . .”
2. **Chair**: “Are there any questions?”
3. **You**: ⟨FALLING DOWN OF PODIUM⟩

## Last slide

Two moments of  $\sim 100\%$  **attention**:

1. **Chair**: “The next speaker is. . .”
2. **Chair**: “Are there any questions?”

## Last slide

Two moments of  $\sim 100\%$  **attention**:

1. **Chair**: “The next speaker is...”

→ use it to display **your name** and the **coauthors**

2. **Chair**: “Are there any questions?”

## Last slide

Two moments of  $\sim 100\%$  **attention**:

1. **Chair**: “The next speaker is...”

→ use it to display **your name** and the **coauthors**

2. **Chair**: “Are there any questions?”

→ use it **better** than

Thanks for your attention!

## Last slide

Two moments of  $\sim 100\%$  **attention**:

1. **Chair**: “The next speaker is...”

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~~Thanks for your attention!~~

## Last slide

Two moments of ~100% **attention**:

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~~Thanks for your attention!~~

**Instead: Discussion Igniting Content**



## Last slide

Two moments of  $\sim 100\%$  **attention**:

1. **Chair**: “The next speaker is...”

→ use it to display **your name** and the **coauthors**

2. **Chair**: “Are there any questions?”

→ use it **better** than

~~Thanks for your attention!~~

**Instead: Discussion Igniting Content**

▶ summary + diagram

## Last slide

Two moments of  $\sim 100\%$  **attention**:

1. **Chair**: “The next speaker is...”

→ use it to display **your name** and the **coauthors**

2. **Chair**: “Are there any questions?”

→ use it **better** than

~~Thanks for your attention!~~

## Instead: **Discussion Igniting Content**

- ▶ summary + diagram
- ▶ open problems

## Last slide

Two moments of  $\sim 100\%$  **attention**:

1. **Chair**: “The next speaker is...”

→ use it to display **your name** and the **coauthors**

2. **Chair**: “Are there any questions?”

→ use it **better** than

~~Thanks for your attention!~~

## Instead: **Discussion Igniting Content**

- ▶ summary + diagram
- ▶ open problems
- ▶ main conjecture

## Last slide

Two moments of  $\sim 100\%$  **attention**:

1. **Chair**: “The next speaker is...”

→ use it to display **your name** and the **coauthors**

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→ use it **better** than

~~Thanks for your attention!~~

## Instead: **Discussion Igniting Content**

- ▶ summary + diagram
- ▶ open problems
- ▶ main conjecture
- ▶ ...

**Thanks for your attention!**