The opinions expressed in this talk are solely those of the author and are not necessarily those of the Department of Physics or the University of Illinois. But they should be.

Text presented in all capital letters is much harder for your audience to read (and you to proofread!). Most people read, not by processing a word letter by letter, but by recognizing **patterns** of letters that extend above the midline of a line of text and below the baseline. When you write in all caps, you lose this pattern recognition.

Be sparing of in the number of colors you use and be consistent in the use of color—people expect changes in color to **mean** something.

Animations can be an effective tool to control what the audience is seeing at a particular time,, but curb your enthusiasm. It's a scientific talk, not a video game. (What **was** that orange thing that streaked across the screen and disappeared?)

#11

Pepper your talk with lots of verbal fillers

You know, sometimes, like, we really *really* use some words too much, *right*? So, *um*, maybe we can, *I don't know*, concentrate on, *like*, eliminating filler words. Filler words *definitely* appear in, *um, literally all of our* sentences when we talk to our, *you know*, friends. But we *really* should, *like*, avoid them in formal, *you know*, talks.

Try recording your talk on Zoom or your phone and then playing it back to see what you *really* sound like.

Ask your practice audience for feedback on verbal fillers and other distracting mannerisms.

#10

Eschew the use of the laser pointer

Point with your finger or wave with your arm, preferably with the hand holding the laser pointer

Employ laser pointer acrobatics

Point out important features on your slides with the laser pointer. Draw a single line or circle around what you want to emphasize, and then TURN THE LASER POINTER OFF.

#9

Use UJ, UDTs, and UAs*

Sound smug when using them

*unfamiliar jargon
*undefined terms
*unknown acronyms

Use the simplest word that accurately conveys your meaning, and be sure to define every acronym and symbol that you use in your talk.

#8

Avoid eye contact with your audience; look at the floor

Mumble

Look at the floor while mumbling

Train yourself to maintain eye contact with the audience, and glance at different areas of the audience. Include everyone in your story—don't always look at the same place.

Train yourself to speak slowly and distinctly. Enunciate your words clearly. If you have a soft voice, use a microphone.

If you are a non-native English speaker, have a native English speaker check your pronunciation.

#7

Read every word on your slides

Face the screen while reading them

Memorize the words and rattle them off in a monotone

Every person in your audience is literate. They can all read faster than you can talk. If all you're going to do is read words that they can read for themselves, why do they need *you*? You're completely useless.

Speak in a warm, engaged, conversational tone.

#6

Make your slides visually boring. Write out all your points in full narrative text. Don't use short phrases or bulleted lists. Avoid images to illustrate data and ideas. Use many equations instead. Eschew color.

Use words sparingly to orient the audience to what they are seeing. Use images and data to explain, exemplify, and give evidence for your words.

Remember that people retain pictures longer and in more detail than they remember words.
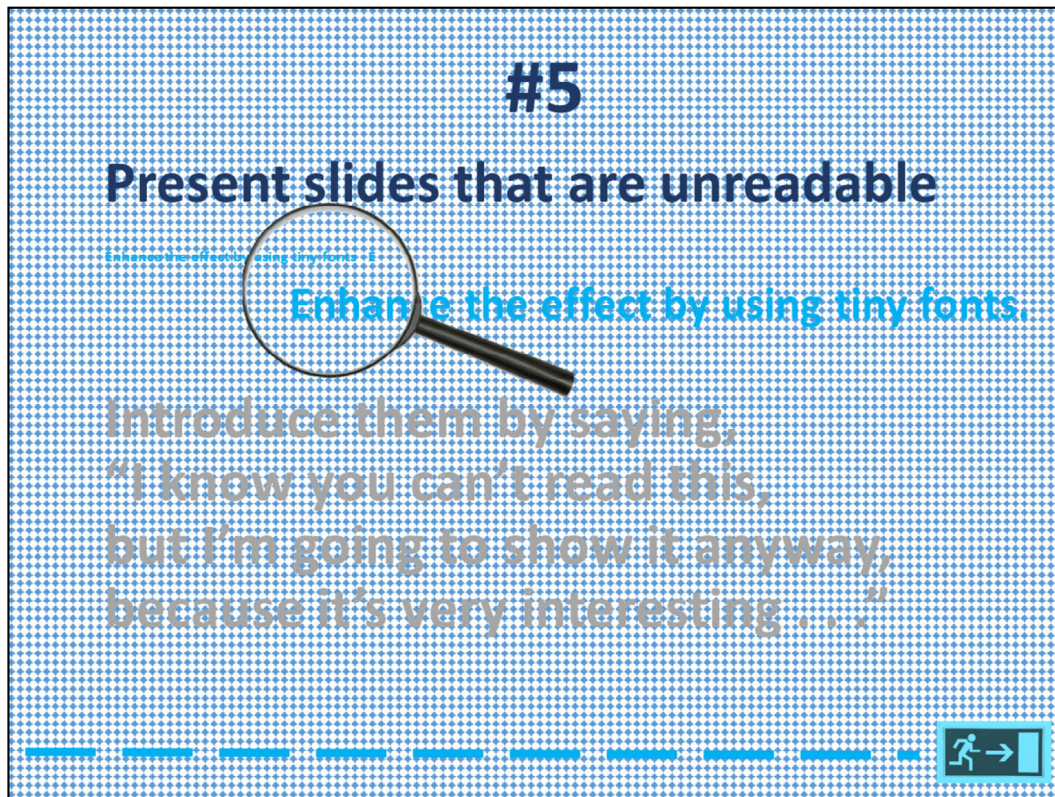
Translation:

Present slides that are unreadable.

Enhance the effect by using tiny fonts.

Introduce them by saying, "I know you can't read this, but I'm going to show it anyway because it's very interesting."

Use a neutral background and high-contrast, legible fonts (min. 24 pt for most talks).

#4

Show complicated plots, tabular data, and lots of equations

Use tiny fonts and no labels

Don't explain anything

Leave those slides up for <10 sec as you rush to finish your talk

If you show plots, simplify them as much as possible, and be sure to label the axes. Add labels or arrows to point out important features.

Avoid showing data tables; they're too hard to read and comprehend in a short amount of time. If you must show a table, highlight the most relevant row(s), column(s), or cell(s) to help the audience concentrate on what is important. Add labels or arrows.

Substitute words for symbols in equations if you can, e.g.,

Photon Fluctuations

DARK ENERGY SURVEY

- After PSF and normalization, must simulate photon fluctuations
- Convert each pixel ADC count to number of photons by gain of each pixel
- Apply Poisson distribution errors to each pixel
- Convert number of photons back to ADC counts

$$\text{New ADC value} = \frac{\text{Poisson(Gain} * \text{Old ADC Value)}}{\text{Gain}}$$

- Finally, superimpose SN onto image

Slide Courtesy Nick Langellier

Replace math with words

#3

Pace around the room and use lots of hand gestures to keep the audience awake

Jiggle coins or keys in your pocket

Leave your cell phone turned on to the most obnoxious ring tone possible

Fiddle with the microphone

Use minimal hand gestures and remember that a perfectly innocuous gesture in your culture may mean something entirely different to the international guests in your audience.

For example, the US "thumbs up," "okay," and "crossed fingers" gestures are extremely offensive in other countries. See https://www.grunge.com/721810/everyday-hand-gestures-that-are-offensive-in-other-countries/

#2

Don't practice—just wing it

Cover too much material

Include too much technical detail

Compensate by skipping slides or talking faster

Your purpose is not to describe everything in your paper. It's to summarize one or two main points in an interesting, engaging way that makes the audience want to go look up your paper and read it.

Note to the physicists: speaker time is invariant. It does not magically expand to accommodate everything you want to say. Ignore the moderator cues, the buzzer, the lights shutting off, the people running to the exits at your peril.