How to Give a Scholarly Paper Presentation

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Rules

- There are no hard and fast rules.
- You can talk with a slideshow or without.
- If you use slides, there is no prescribed format.
- If you talk without slides, there is no prescribed format.
- What follows is my advice, not mandatory instructions or rules.

Goals

- Get comfortable giving an oral presentation.
  - That's a goal for this class.
- Improve your presentation skills.
  - That's another goal for this class.
- Get helpful feedback on your paper.
  - This is the main goal of legal scholarship presentations, and it should be the driving aim of your presentation.
  - It means you want feedback that will help you to improve and finish your work-in-progress.

My Key Advice

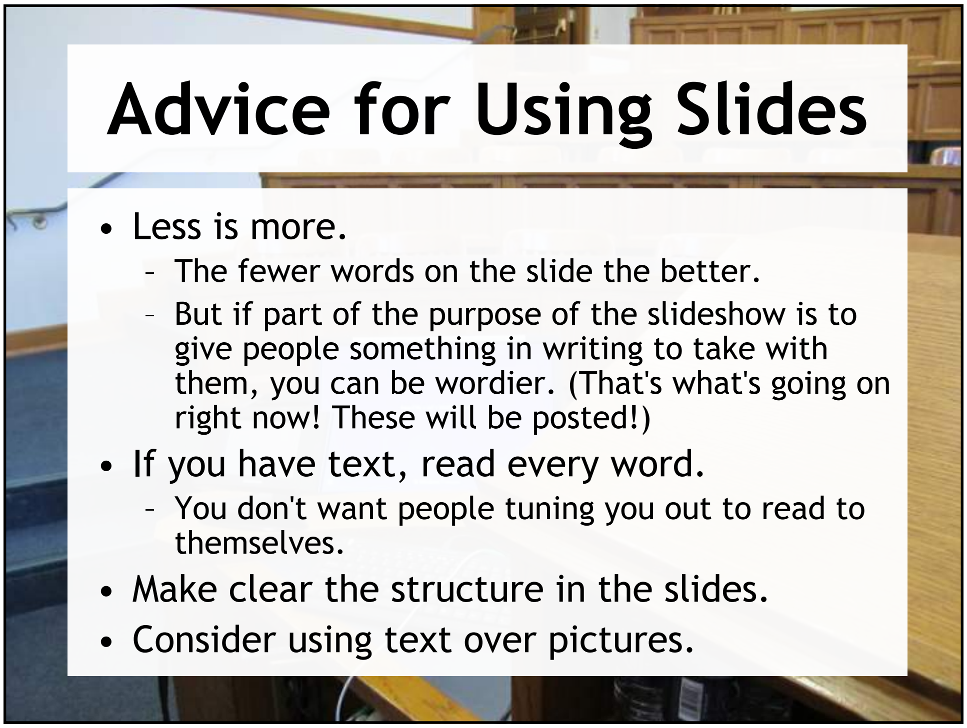
- Less is more. Have the audience walk away knowing your main idea.
- Focus on making sure the audience understands your talk's structure.
  - If you talk without slides, signpost orally.
  - If you use slides, try to build identifiable structure into the slides.
- Relax.
  - It's a friendly, supportive audience.
  - Keep in mind the main goal: to get helpful feedback, not to show off how amazing your paper is or how polished you are.
  - Keep in mind the other goals: to improve your presentation skills and to get more comfortable.

Talking Without Slides

- Again: Have the audience walk away knowing your main idea.
  - Repeat it multiple times: Start, middle, end.
- Make clear the structure with signposting. E.g.:
  - Start with "I'm going to make my argument in three parts …" Then name them.
  - When you get to the first part: "Now the first part of my argument, that blah blah blah …"
  - When you get to the second part: "So that was the first part of my argument, that blah blah blah. Now I'll move to the second part of my argument, that …"
  - And so on.
  - Maybe this sounds boring, but your audience will love it.

Advice for Using Slides

- Less is more.
  - The fewer words on the slide the better.
  - But if part of the purpose of the slideshow is to give people something in writing to take with them, you can be wordier. (That's what's going on right now! These will be posted!)
- If you have text, read every word.
  - You don't want people tuning you out to read to themselves.
- Make clear the structure in the slides.
- Consider using text over pictures.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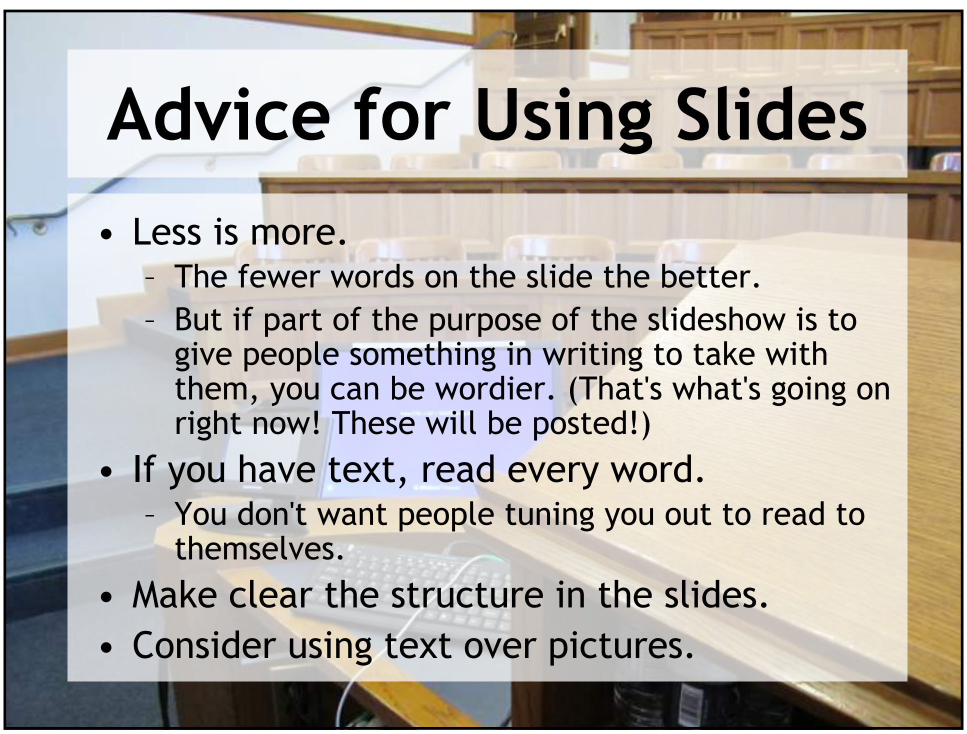
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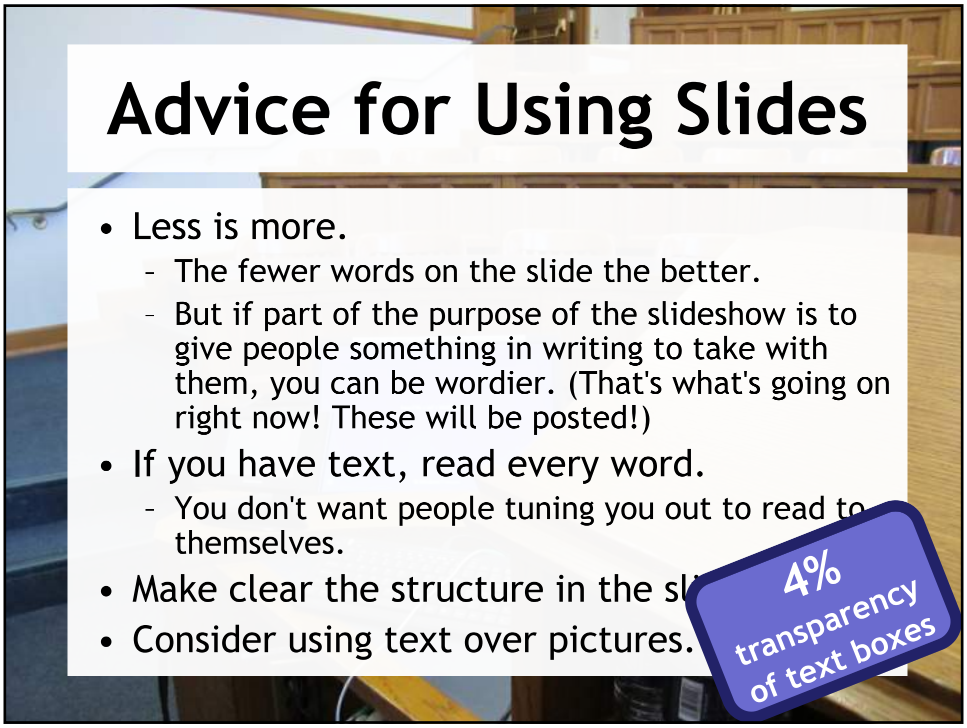
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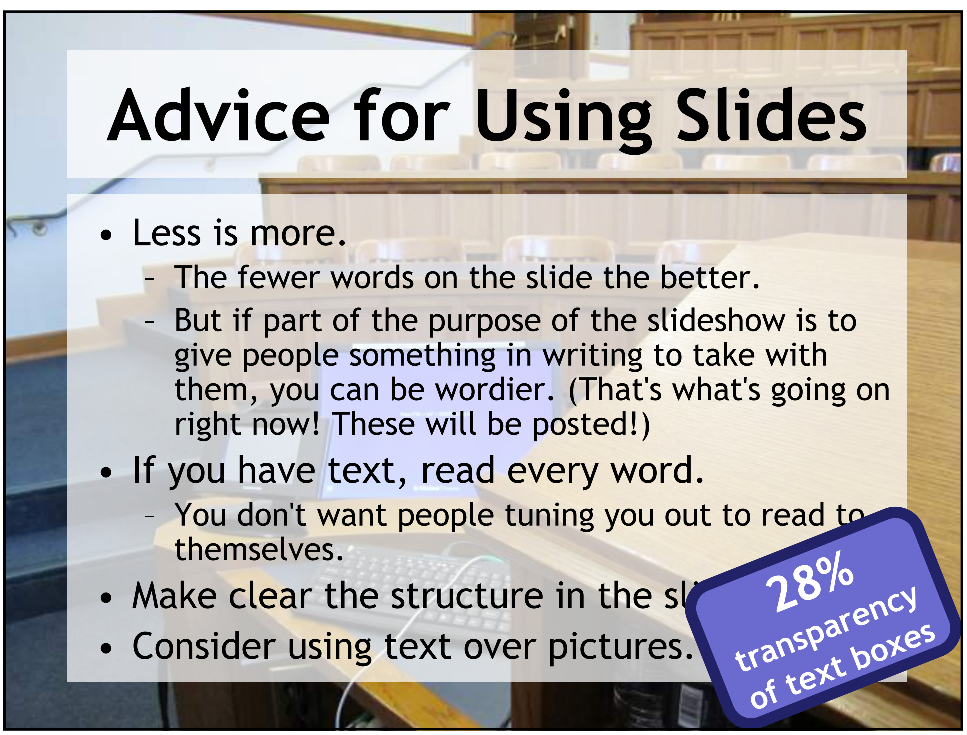
4% transparency of text boxes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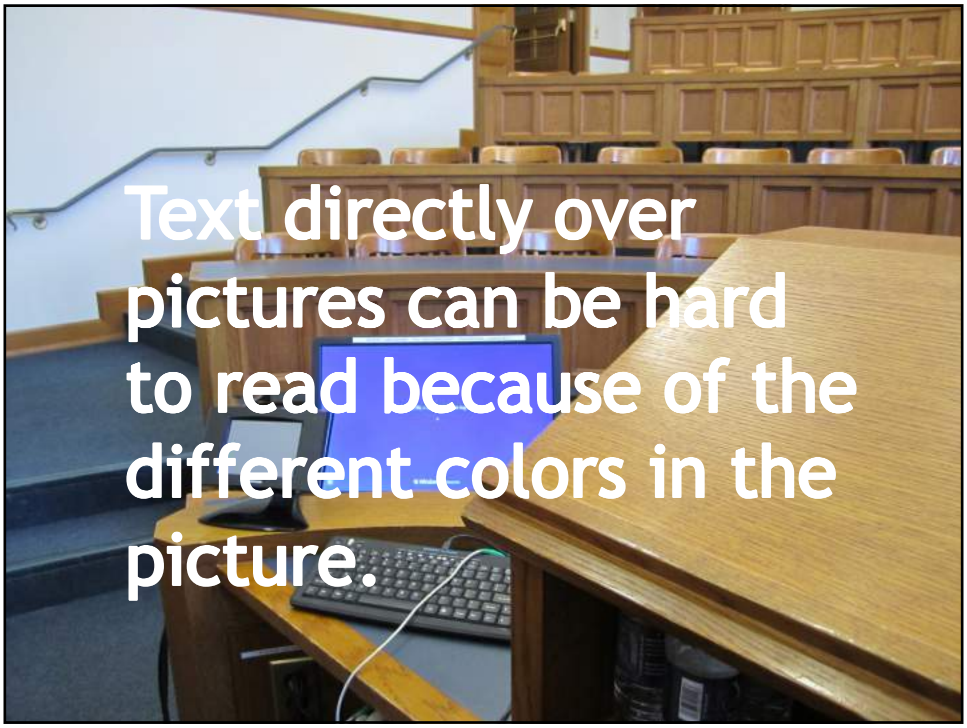
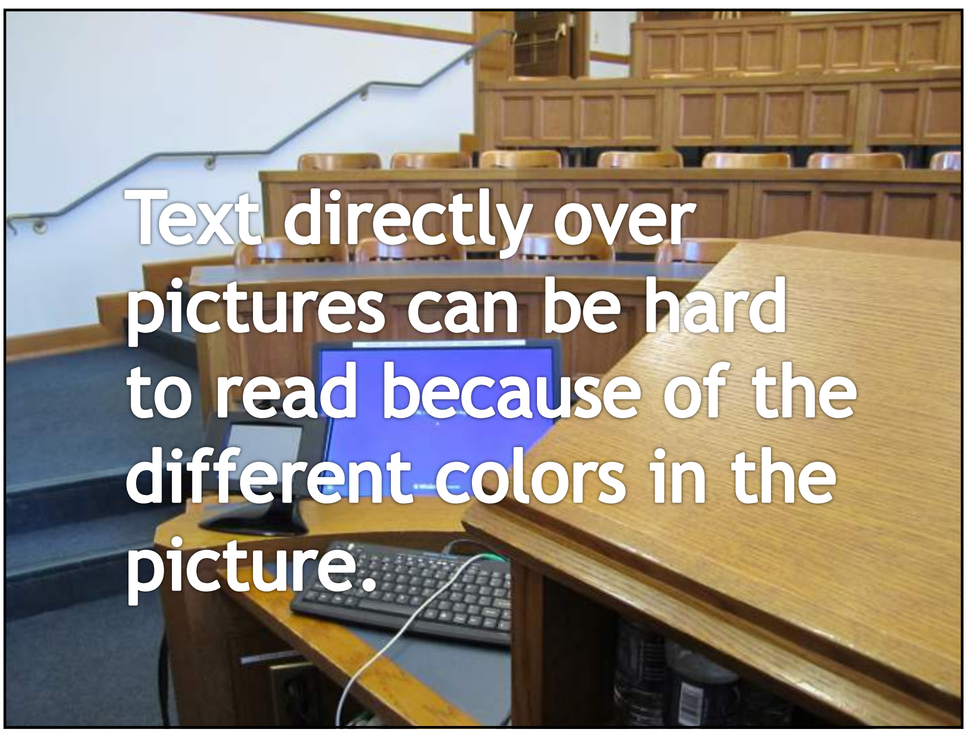
28% transparency of text boxes


Text directly over pictures can be hard to read because of the different colors in the picture.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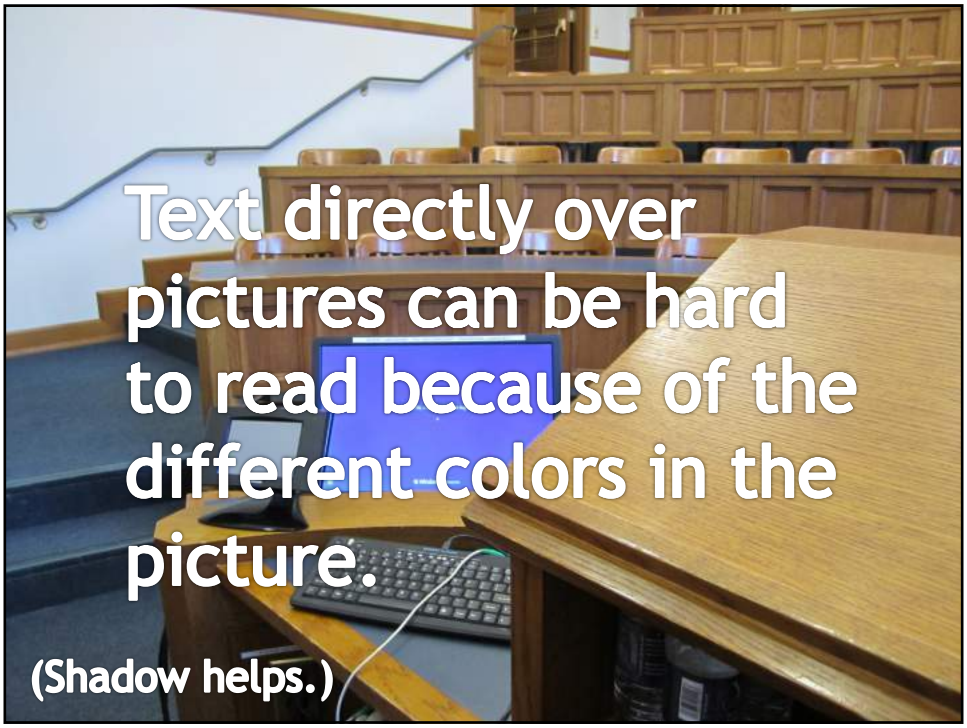
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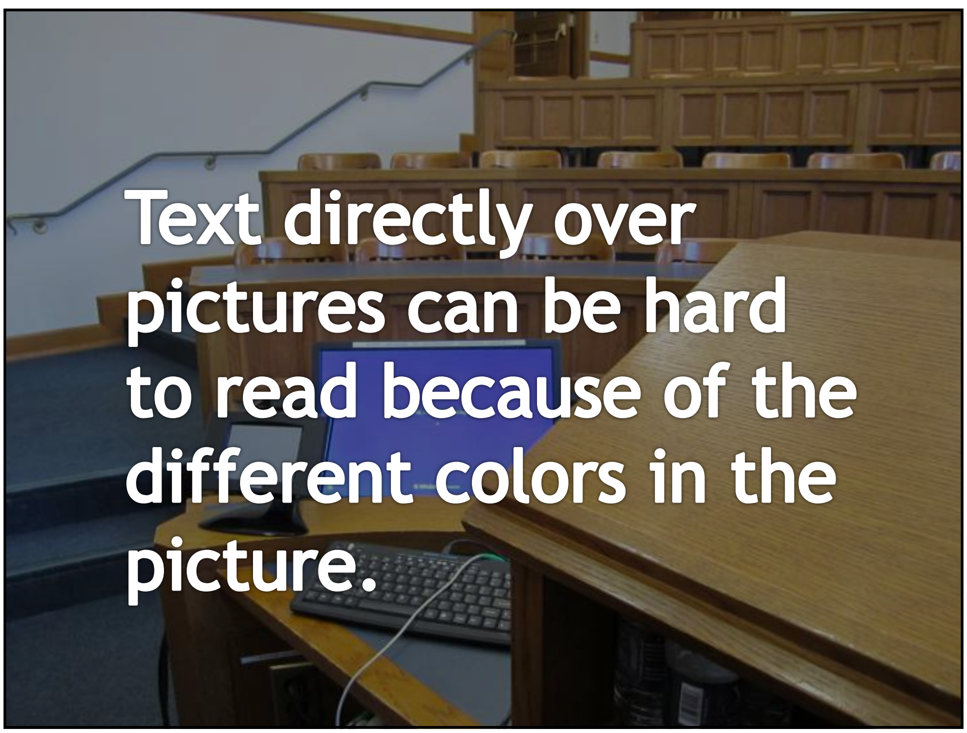
(Shadow helps.)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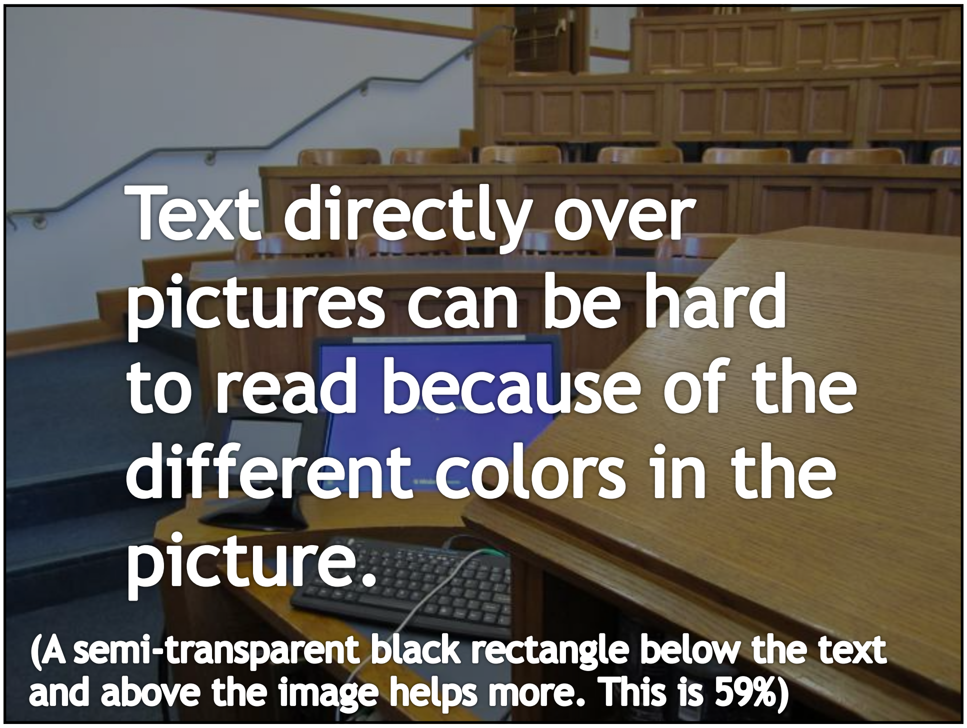
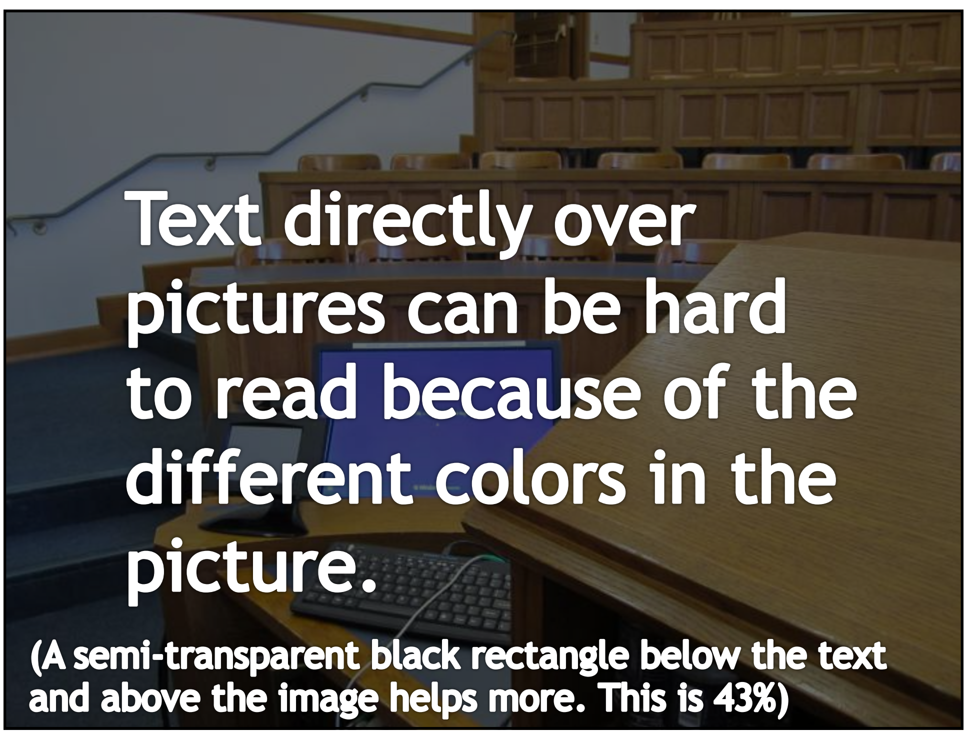

Text directly over pictures can be hard to read because of the different colors in the picture.
(A semi-transparent black rectangle below the text and above the image helps more. This is 59%)


Text directly over pictures can be hard to read because of the different colors in the picture.
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(If you get to part of your talk where the audience should be looking at you, not the slides, insert a blank. Or press B for blackout.)

The One-Slide Method

- One slide can be your whole presentation.
- If you have three main steps to your argument,
- three bullet points works great.

An example of presenting text information visually (from the reading)

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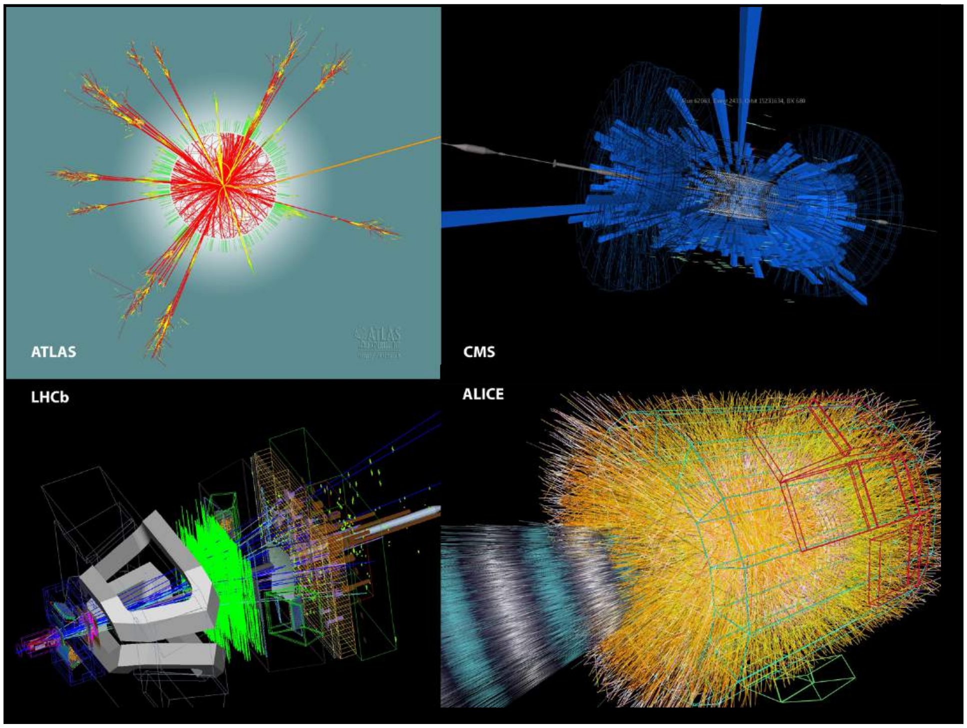
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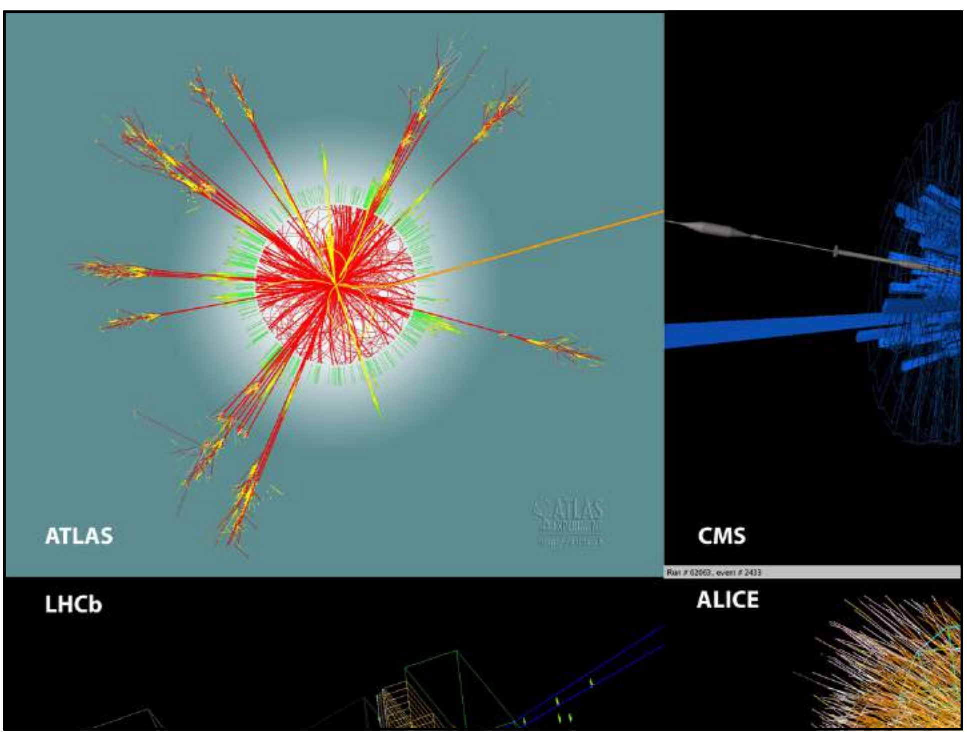
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Selected for a Viewpoint in *Physics*
PHYSICAL REVIEW D **78**, 035009 (2008)

Astrophysical implications of hypothetical stable TeV-scale black holes

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[2]*PH-TH, CERN, Geneva, Switzerland*
(Received 2 June 2008; published 18 August 2008)

We analyze macroscopic effects of TeV-scale black holes, such as could possibly be produced at the LHC, in what is regarded as an extremely hypothetical scenario in which they are stable and, if trapped inside Earth, begin to accrete matter. We examine a wide variety of TeV-scale gravity scenarios, basing the resulting accretion models on first-principles, basic, and well-tested physical laws. These scenarios fall into two classes, depending on whether accretion could have any macroscopic effect on the Earth at times shorter than the Sun's natural lifetime. We argue that cases with such an effect at shorter times than the solar lifetime are ruled out, since in these scenarios black holes produced by cosmic rays impinging on much denser white dwarfs and neutron stars would then catalyze their decay on time scales incompatible with their known lifetimes. We also comment on relevant lifetimes for astronomical objects that capture primordial black holes. In short, this study finds no basis for concerns that TeV-scale black holes from the LHC could pose a risk to Earth on time scales shorter than the Earth's natural lifetime. Indeed, conservative arguments based on detailed calculations and the best-available scientific knowledge, including solid astronomical data, conclude, from multiple perspectives, that there is no risk of any significance whatsoever from such black holes.

DOI: 10.1103/PhysRevD.78.035009 PACS numbers: 13.85.-t, 04.70.-s, 14.80.-j, 97.10.Gz

I. INTRODUCTION

One of the most spectacular manifestations of nature realizing certain extra-dimensional scenarios [1–4] could be the production of microscopic black holes at the LHC [5,6].[1] These are expected to undergo prompt, quasithermal, Hawking [9] decay to large multiplicities of elementary particles, leading to very characteristic final states. It has been suggested [10,11], however, that black hole decay via Hawking radiation may not be a universal feature, and could, for example, depend on the details of the Planck-scale degrees of freedom. While this suggestion is not based on any complete microphysical picture, and furthermore appears contradictory to basic quantum-mechanical principles[2], it does raise a possible question about stability of microscopic black holes that might be produced at the LHC, in TeV-scale gravity scenarios. This in turn has led some to express concern about the fate of their evolution: could their accretion pose any threat to the Earth? This is the question addressed in this paper.

The structure of this work, and a succinct summary of our findings, are outlined here. We begin our work by reviewing what are widely regarded as quite convincing arguments for the robustness of the exceedingly rapid decay of microscopic black holes. We then discuss the arguments asserting that macroscopic consequences of new and unknown particles can be ruled out by the lack of evidence for their effects from production by cosmic rays hitting the surface of the Earth or other astronomical bodies. We argue here that charged black holes will lose enough energy to stop when traversing the Earth or the Sun, via standard electromagnetic processes. Since black holes would be typically produced by the collision of quark pairs, whether in cosmic-ray interactions or at the LHC, they would often be initially charged. To the extent that no mechanism leads to their neutralization, the cosmic-ray based argument for their being harmless is therefore robust. Their neutralization through the Schwinger mechanism proceeds according to quantum principles like those underlying Hawking radiation. There is therefore no concrete framework where neutralization occurs without Hawking decay taking place as well, leading to a likely contradiction in assuming that stable black holes must be neutral. We nonetheless make the hypothesis that this odd situation could occur, and analyze the possible effects of such neutral and stable black holes, beginning with a review of some essential features of gravity and black holes in $D > 4$ dimensions, including both large- and warped-extra-dimensions models.

Next, we develop the formalism to describe the evolution of such black holes trapped inside the Earth or inside dense objects such as white dwarfs and neutron stars. We introduce and discuss accretion scenarios that apply within nuclear, atomic, and macroscopic matter, evaluating the time scales corresponding to various phases in the evolution of a growing black hole. We establish upper and lower limits to the rate at which accretion can take place, building on very basic principles such as conservation laws and classical and quantum dynamics. This is possible since, in order for accretion to become macroscopic, it is neces-

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[1]For reviews with more references see [7,8].
[2]See, for example, [12].

1550-7998/2008/78(3)/035009(47) 035009-1

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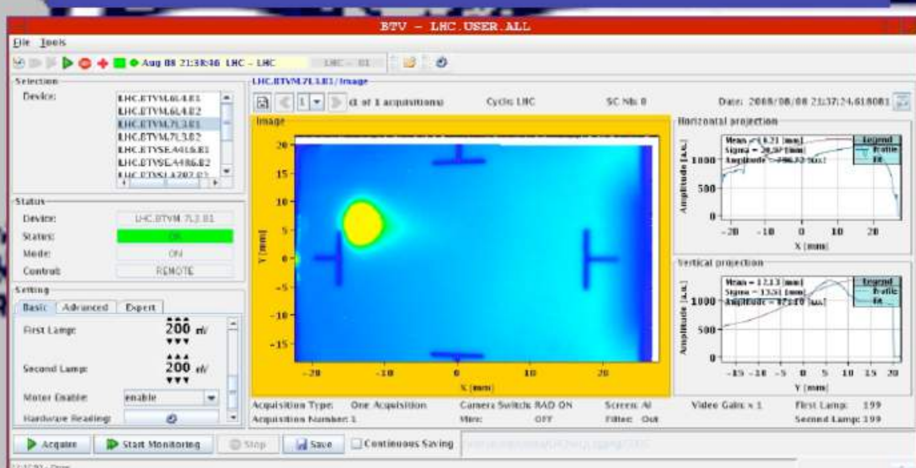
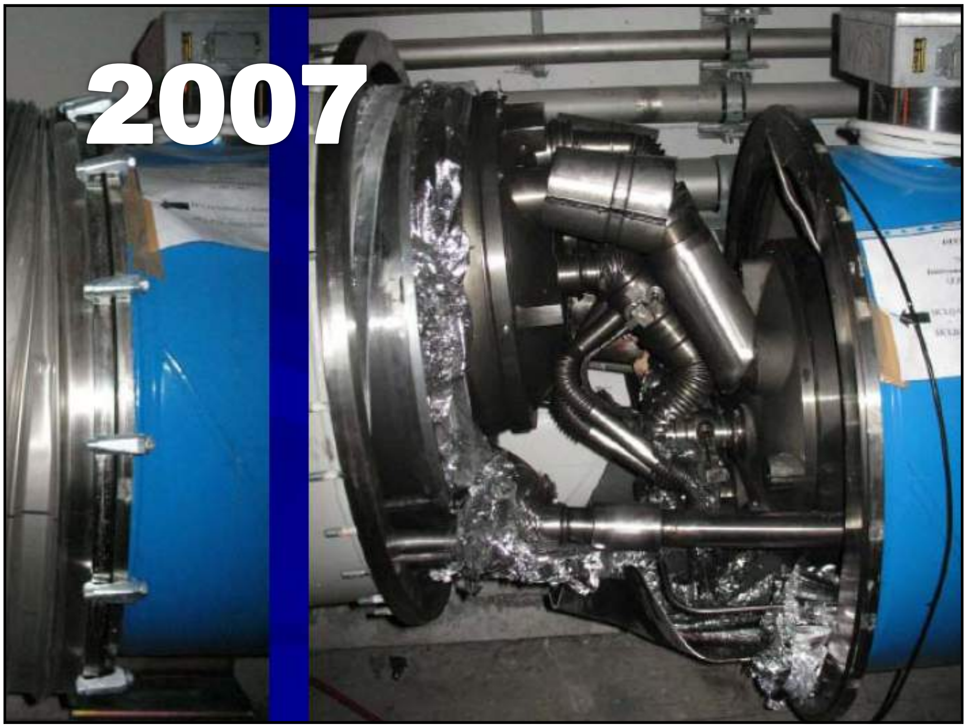
The Best Answer …



… get the LHC working

Another example, also from the reading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2008


2008
“leak”