

# **TALKING SCIENCE, SPEAKING POWERPOINT**

**N. DEAN PENTCHEFF**

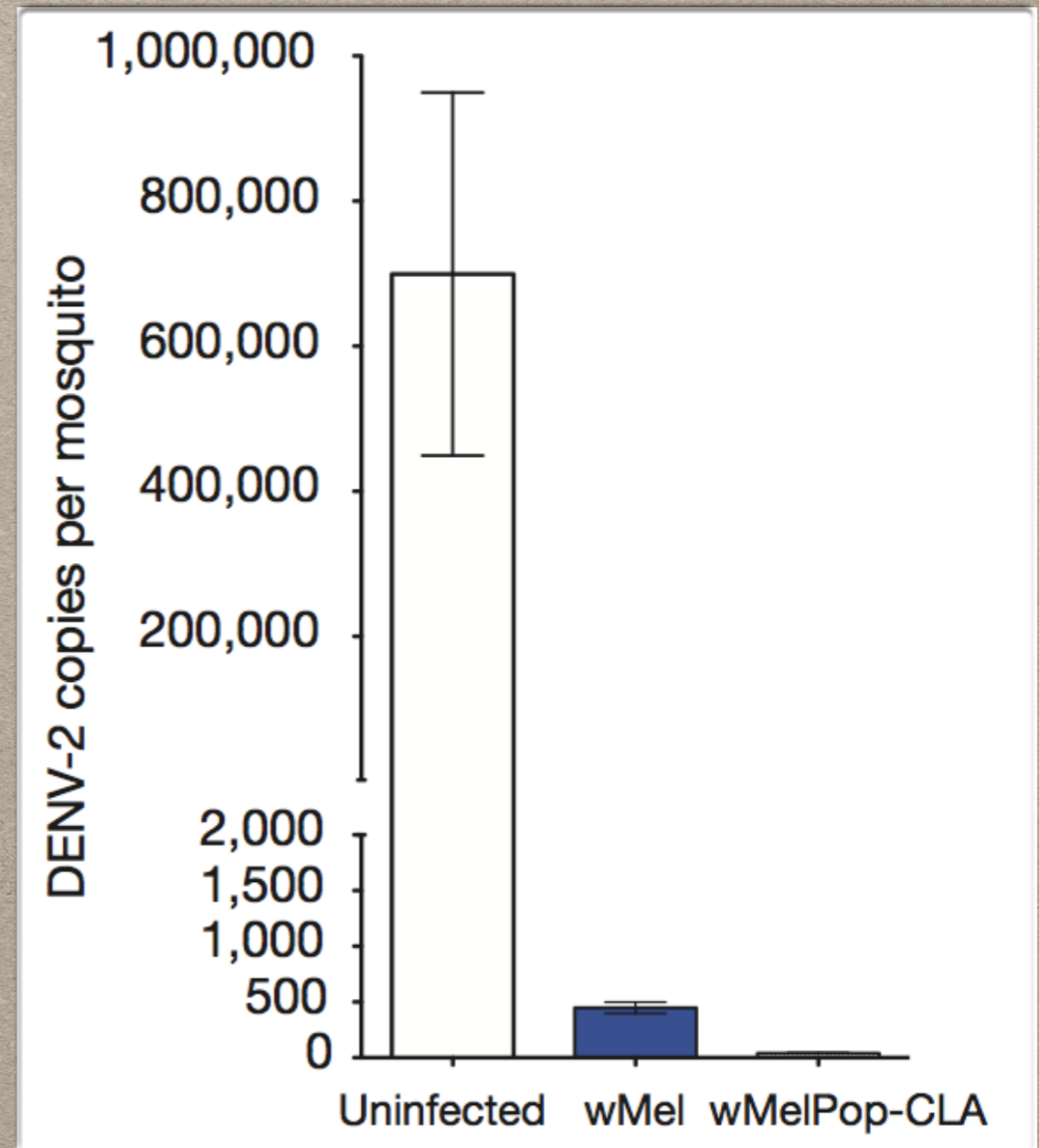
*MARINE BIODIVERSITY CENTER*

# FORM AND FUNCTION

- What is the talk?
- How is it crafted?

# WHAT IS THE POINT?

- Are you promoting ideas? Yourself? Techniques?
- What objective content do you need to convey?
- What do you want the audience to walk away with?
- How do you want them to feel?



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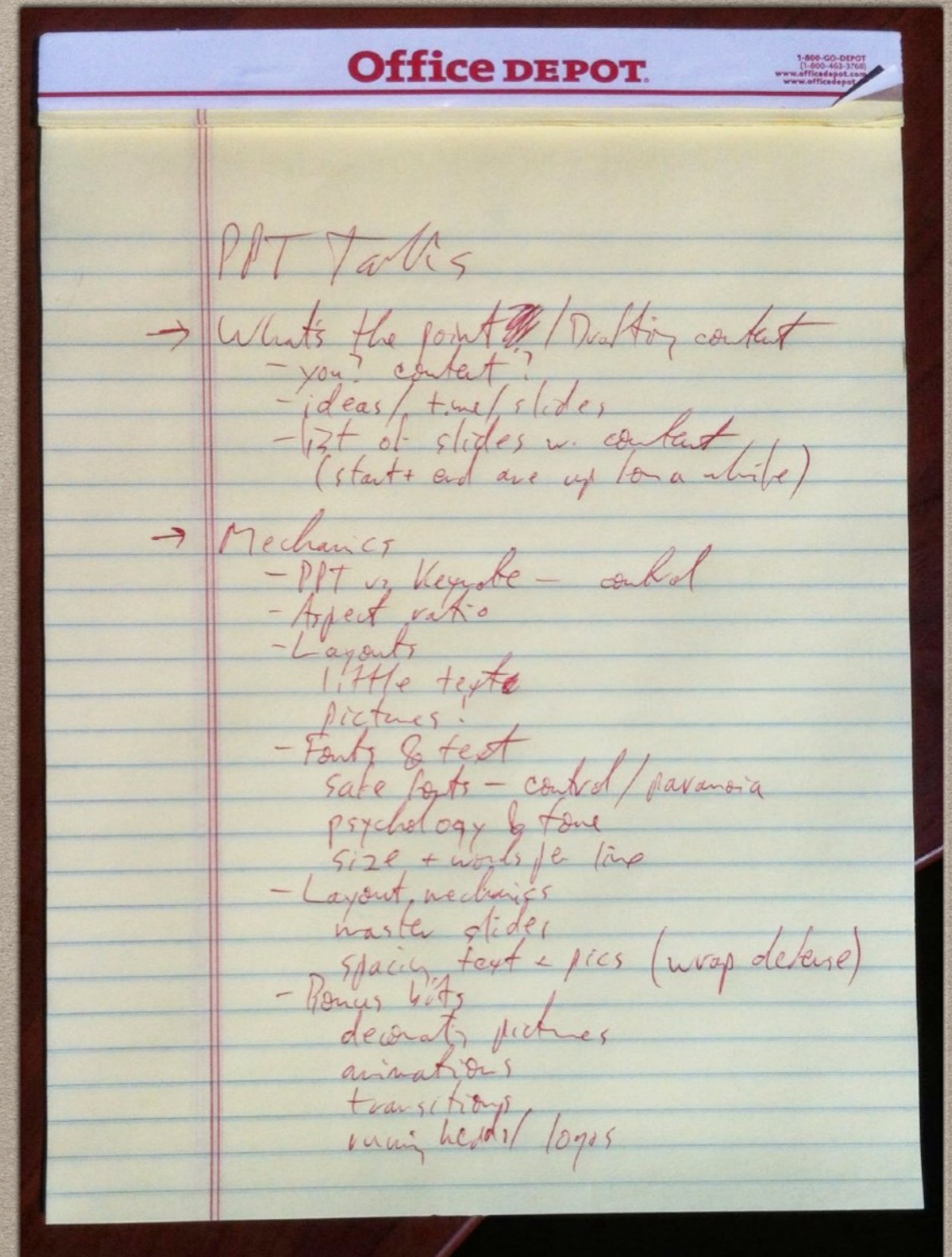


# IDEAS, SLIDES, AND TIME

- You have to:
  - I) Set the context
  - II) Deliver the content
  - III) Wrap up and conclude
- Talk time vs. number of ideas
  - 5 minute talk: 1 idea**
  - 15 minute talk: 3 ideas**
- Very roughly: **1 slide / minute**

# DRAFTING THE TALK

- Make a one-page list of topics and slides
- Highlight photos and data graphics you need
- The first and last slides may be up for a while



# MECHANICS OF THE SHOW



- **Keynote**
  - Easier to be gracious
  - Mac only
- **Powerpoint**
  - Easier to be ugly and clunky
  - Cross-platform
- Base it on presentation control
- It is possible, but tricky, to convert one to the other



# ASPECT RATIO

- Choice depends on knowledge of your venue  
*You can usually go with "Wide" these days*

*Standard 4:3*



*Wide 16:9*



*Correct*

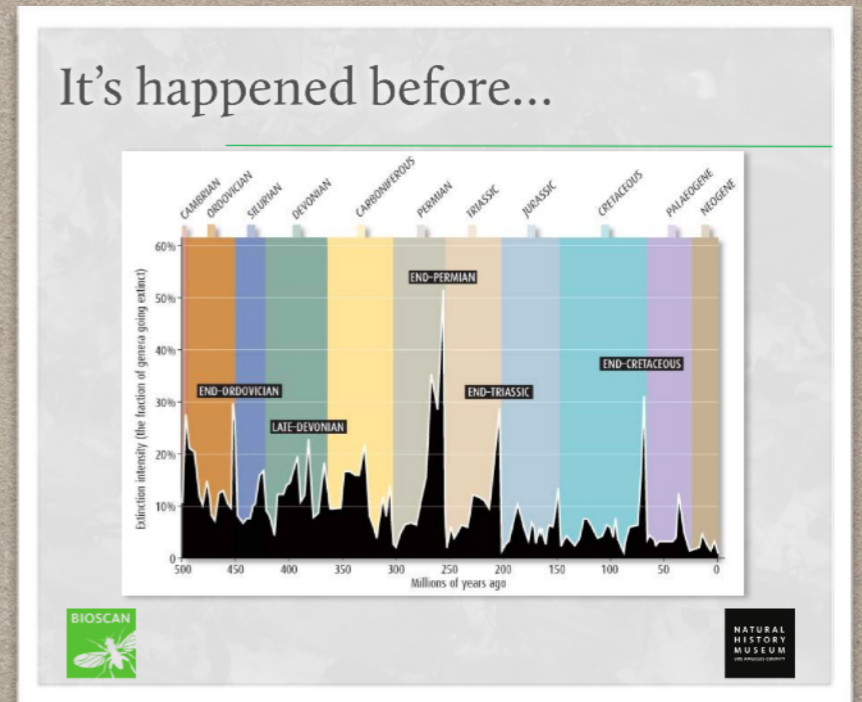
*Bummer*



# INDIVIDUAL SLIDE LAYOUT

- Use little text  
*Notes, not narrative*
- Use images  
*Viewing beats reading*

**Title &  
Image**



**Title &  
Images**

Who does all that work?

- USC undergraduates (and others)



**WHAT IS THE POINT?**

- Are you promoting yourself?
- Is there objective content you need to convey?
- What do you want the audience to walk away with?
- How do you want them to feel?



**Title,  
Text &  
Image**

# INDIVIDUAL SLIDE LAYOUT

- ***Use as little text as possible***
  - More text is not useful, it is distracting
  - Viewers will be reading your text rather than listening to you speak
  - Use your text as a cue to yourself to speak, rather than as a detailed exposition
- ***Use diagrams and pictures whenever possible***
  - Viewers are able to comprehend a picture at a single glance, rather than reading it linearly
  - Graphics communicate detailed information better than text or voice alone
  - Unbroken text gets wearing on the audience

# **FORMAT AND FONTS**

# **Style Matters**

# **FORMAT AND FONTS**

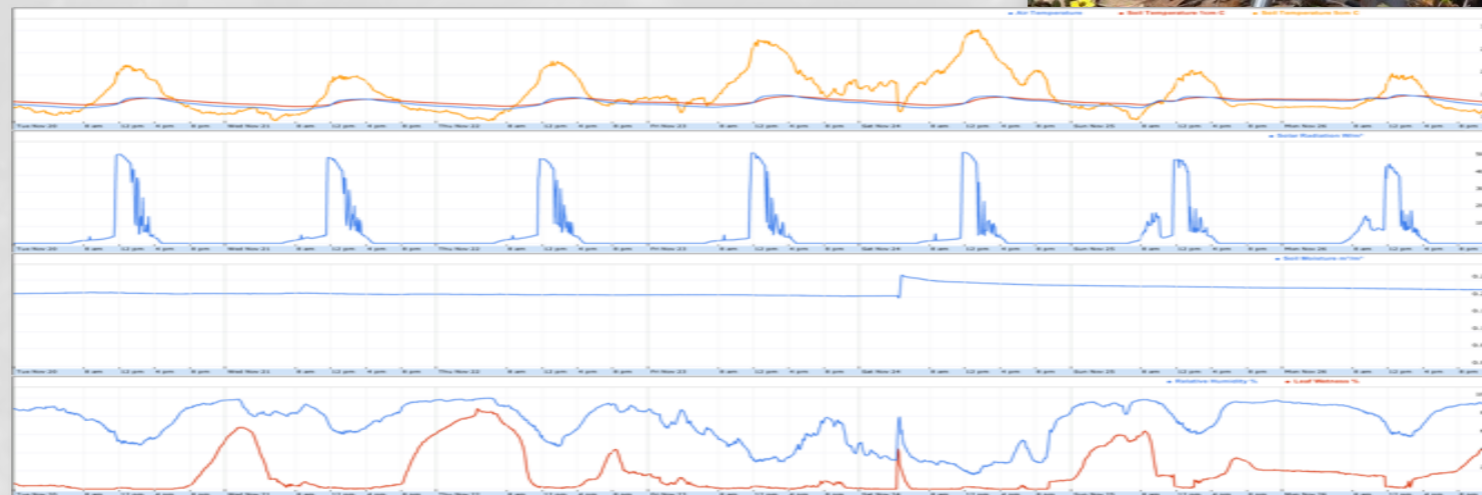
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# **FORMAT AND FONTS**

## ***Style Matters***

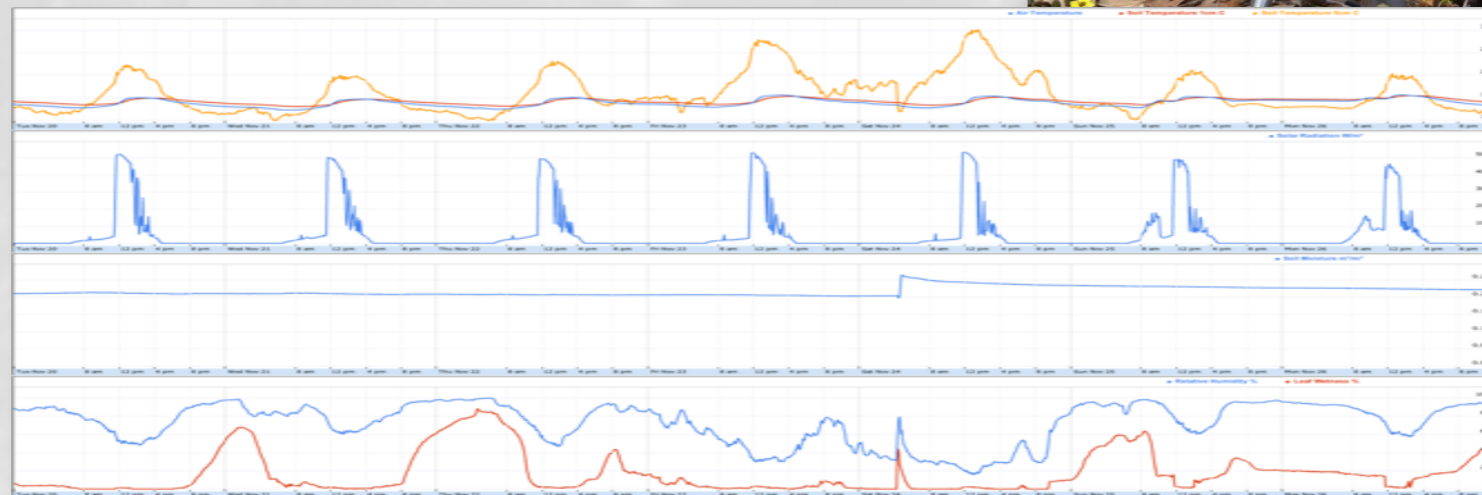
# What's the microclimate station?

- Solar radiation
- Condensing moisture
- Air temp & RH
- (Solar power & logger)
- Soil temp at 1 & 5 cm
- Soil moisture



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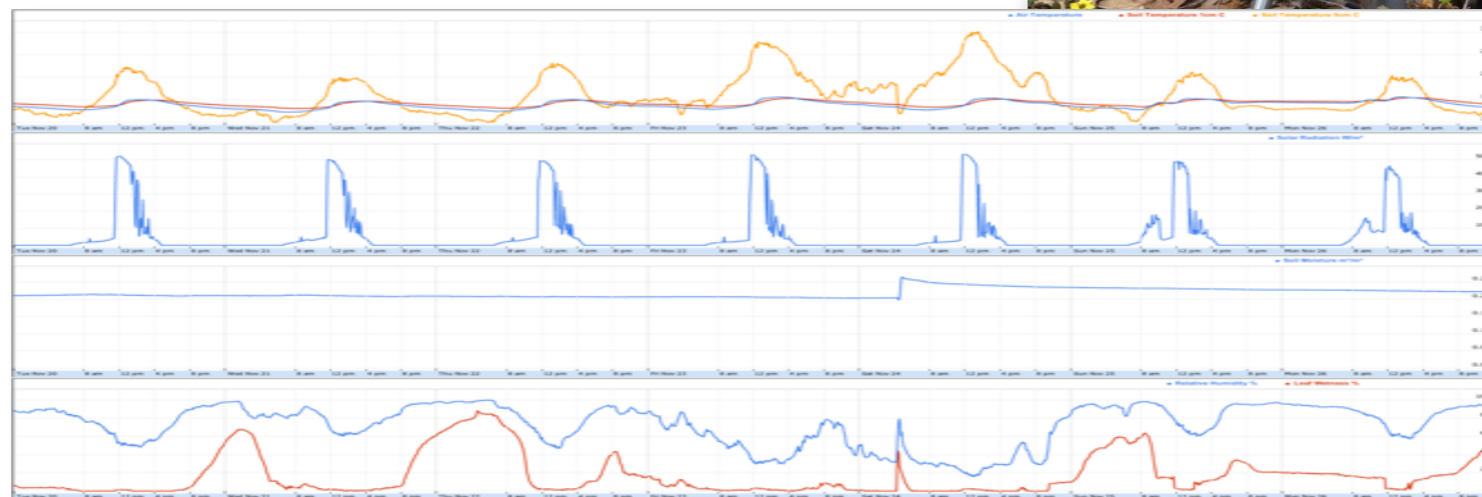
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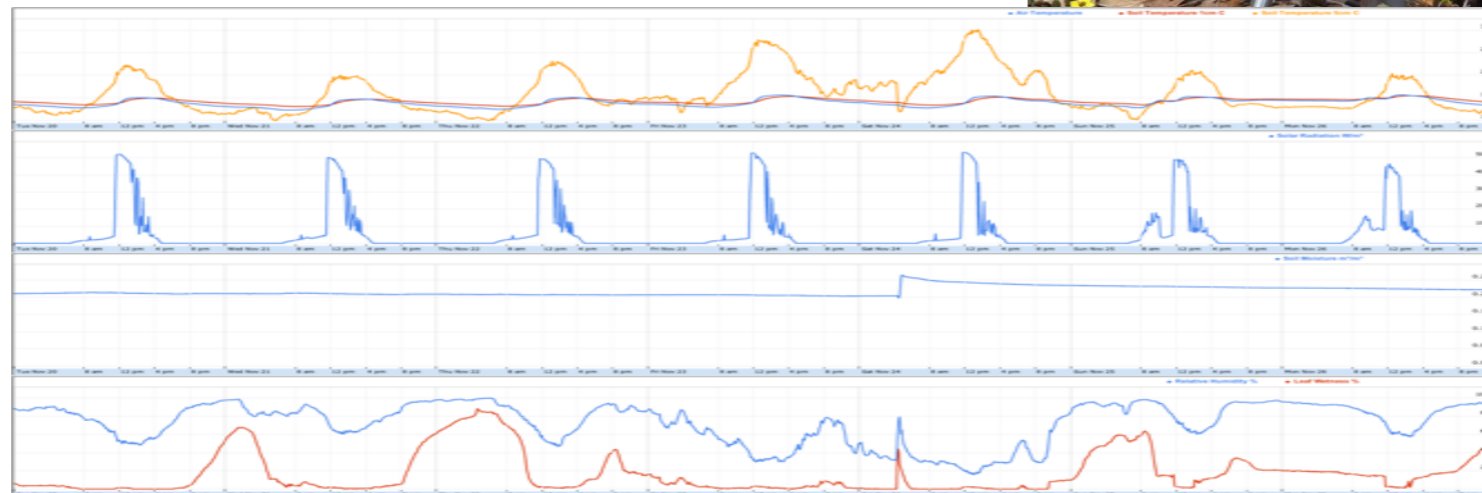
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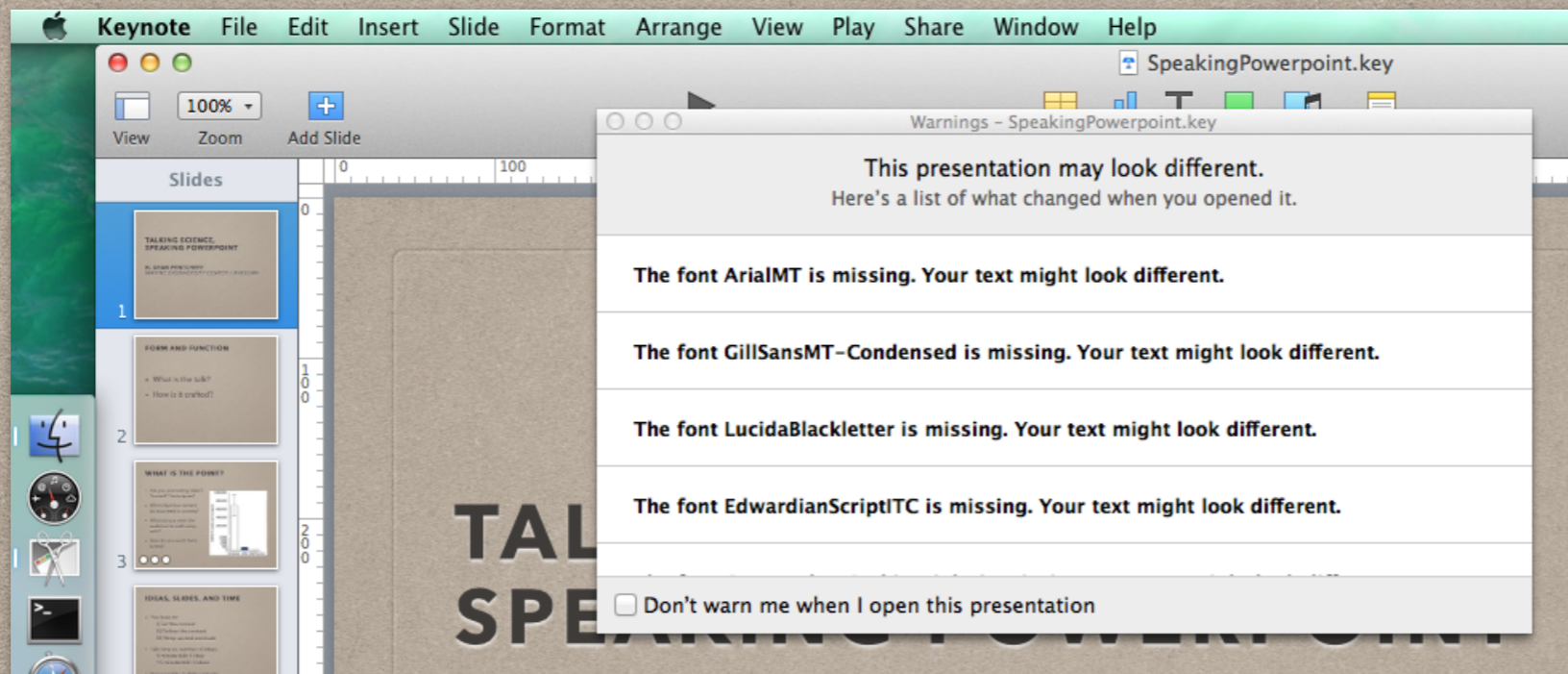
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- Solar radiation
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# FONT CHOICE: APPROPRIATE PARANOIA

- If you know you'll use your own laptop:  
*Anything goes – you have complete control*
- Otherwise:  
*Be paranoid, use safe fonts and extra space*



*This is what  
you don't  
want to see*

# FONT CHOICE: APPROPRIATE PARANOIA

- *Font paranoia*

Arial, Georgia, Times (**not:** Calibri, Comic Sans)

- *Layout paranoia*

Leave extra space for unexpected wraps

# FONT CHOICE: APPROPRIATE PARANOIA

- *Font paranoia*

Arial, Georgia, Times (**not:** Calibri, Comic Sans)

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Leave extra space for unexpected wraps

*Original*

Originally in Arial Narrow,  
two lines of text

Originally in Arial Narrow,  
two lines of text

*not enough  
space here*

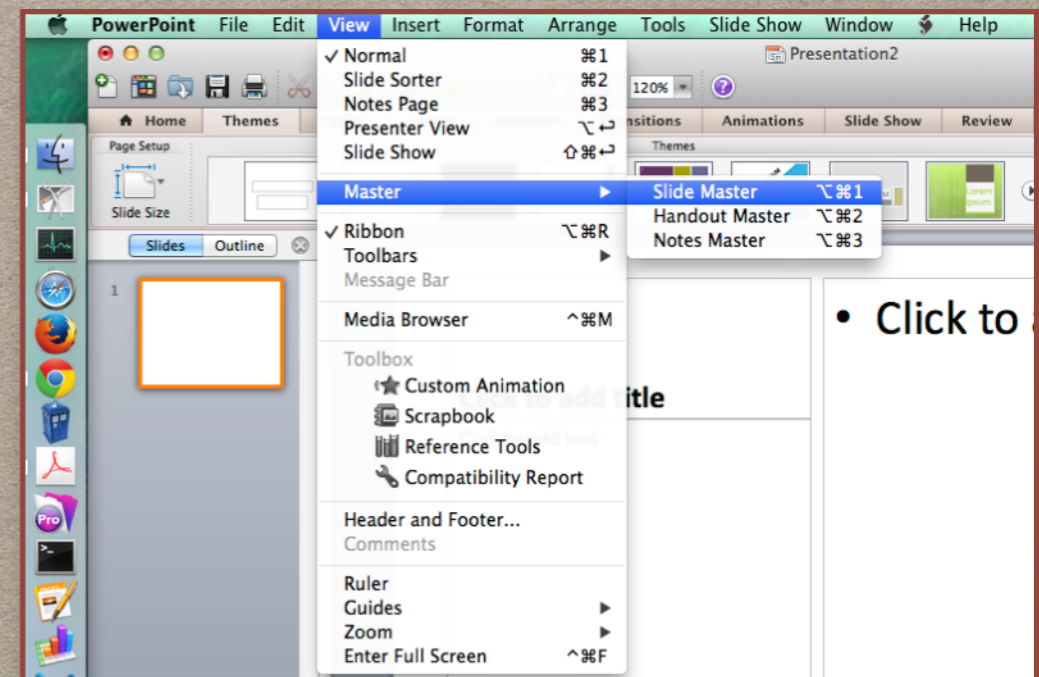
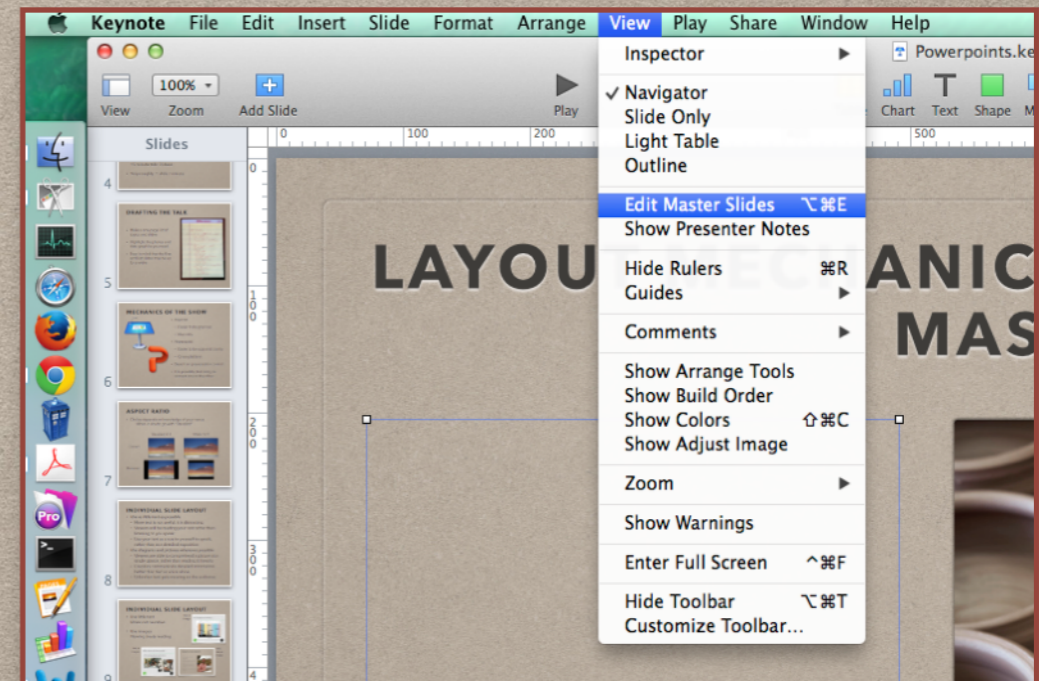
*Substitute font:  
Arial Ouch*

Originally in Arial  
Narrow  
two lines of text

Originally in Arial Narrow,  
two lines of text

# LAYOUT MECHANICS: MASTER SLIDES

- *Master slides* apply to all slides of that format
- Use master slides for:
  - Backgrounds
  - Fonts
  - Logos / Footers
- Changing the master slide changes everything





# LAYOUT MECHANICS: IMAGES



*Original*



*Drop shadow:*

*Blur: 4pt*

*Offset: 2pt*

*Opacity: 50%*

*Angle: 328°*



*Picture frame*



*Line (fancy)*

# LAYOUT MECHANICS: ANIMATION

## *Text animations*

- All at once

# LAYOUT MECHANICS: ANIMATION

## *Text animations*

- By bullet group
- Sections come up
  - subsections included
  - reveal consecutive ideas

# LAYOUT MECHANICS: ANIMATION

## *Text animations*

- By bullet
- Lines come up
  - subsections individually
  - reveal consecutive lines

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## *Image animations*



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## *Text animations*

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## *Image animations*



*Identically-sized,  
second image  
dissolves in over  
first image*

# LAYOUT MECHANICS: ANIMATION

## *Text animations*

- By bullet
- Lines come up
  - subsections individually
  - reveal consecutive lines

## *More complex animations*

## *Image animations*



*Identically-sized,  
second image  
dissolves in over  
first image*

1. Build **in** on click



# LAYOUT MECHANICS: ANIMATION

## *Text animations*

- By bullet
- Lines come up
  - subsections individually
  - reveal consecutive lines

## *More complex animations*



1. Build **in** on click

2. Build **out** on click

3. Build **in** with previous build

## *Image animations*



*Identically-sized,  
second image  
dissolves in over  
first image*

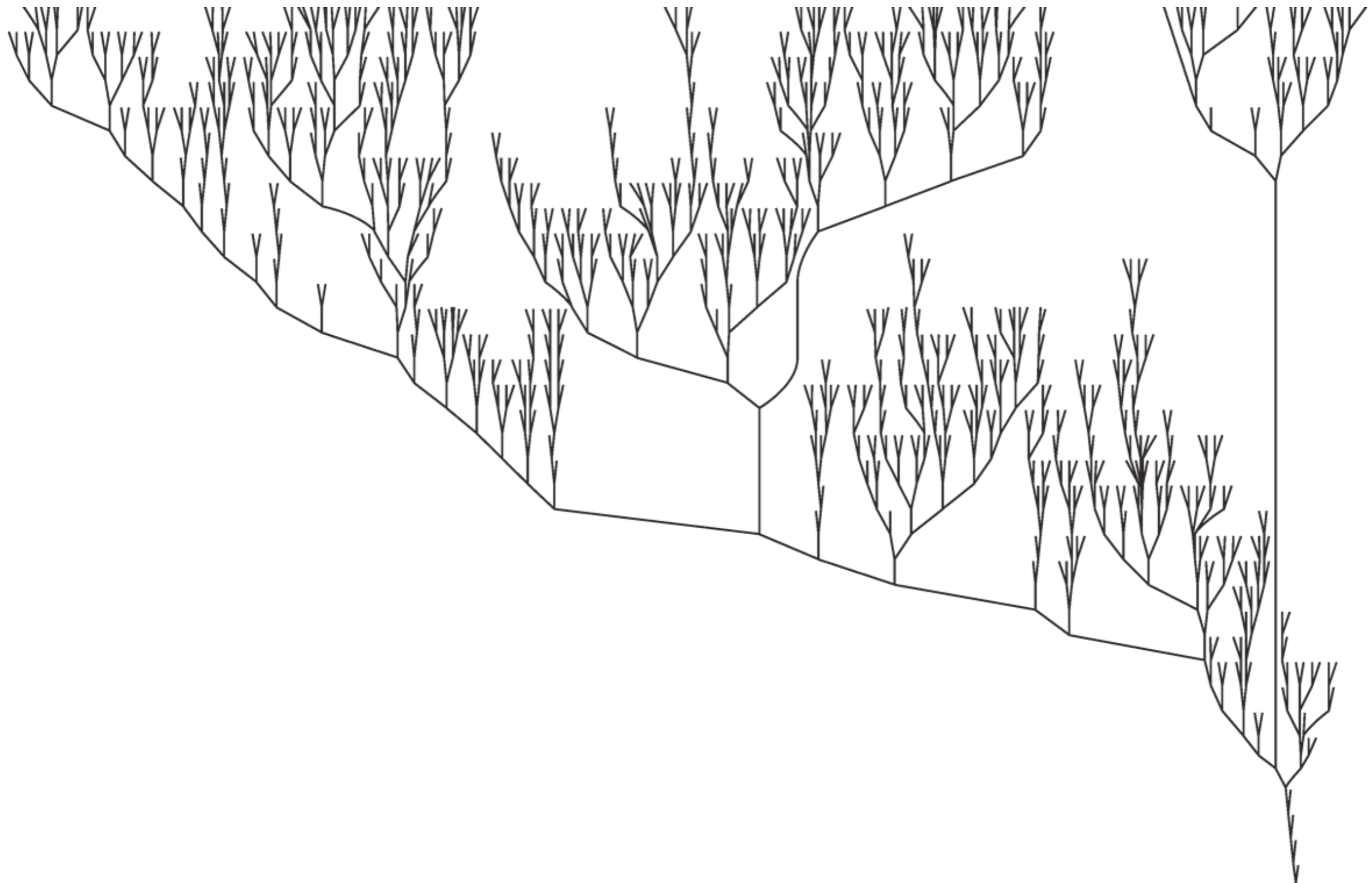


*Where did the diversity we  
have today come from?*

# Origin of Life

Origin of Life

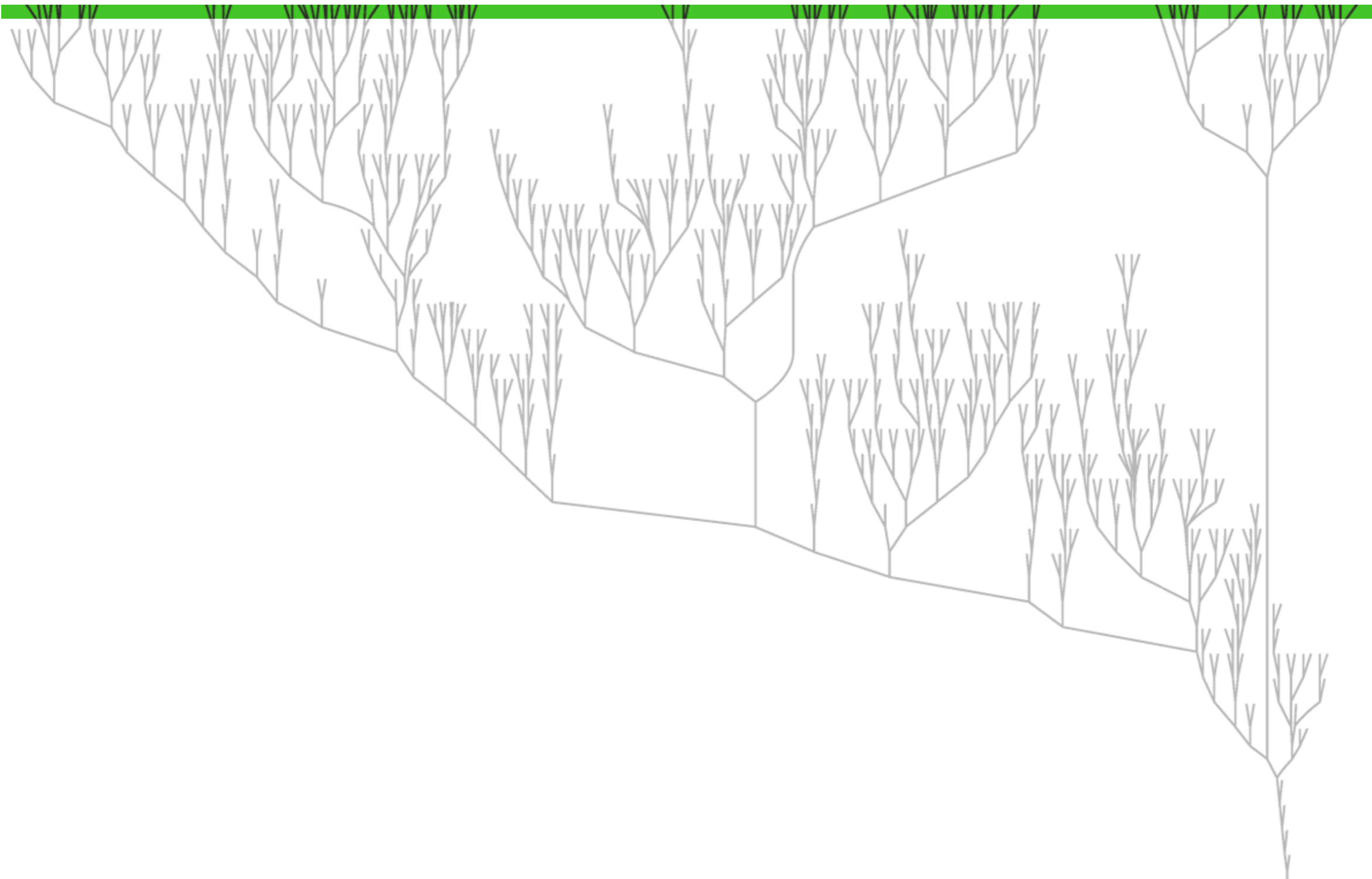
Time →



Origin of Life

Time →

Now



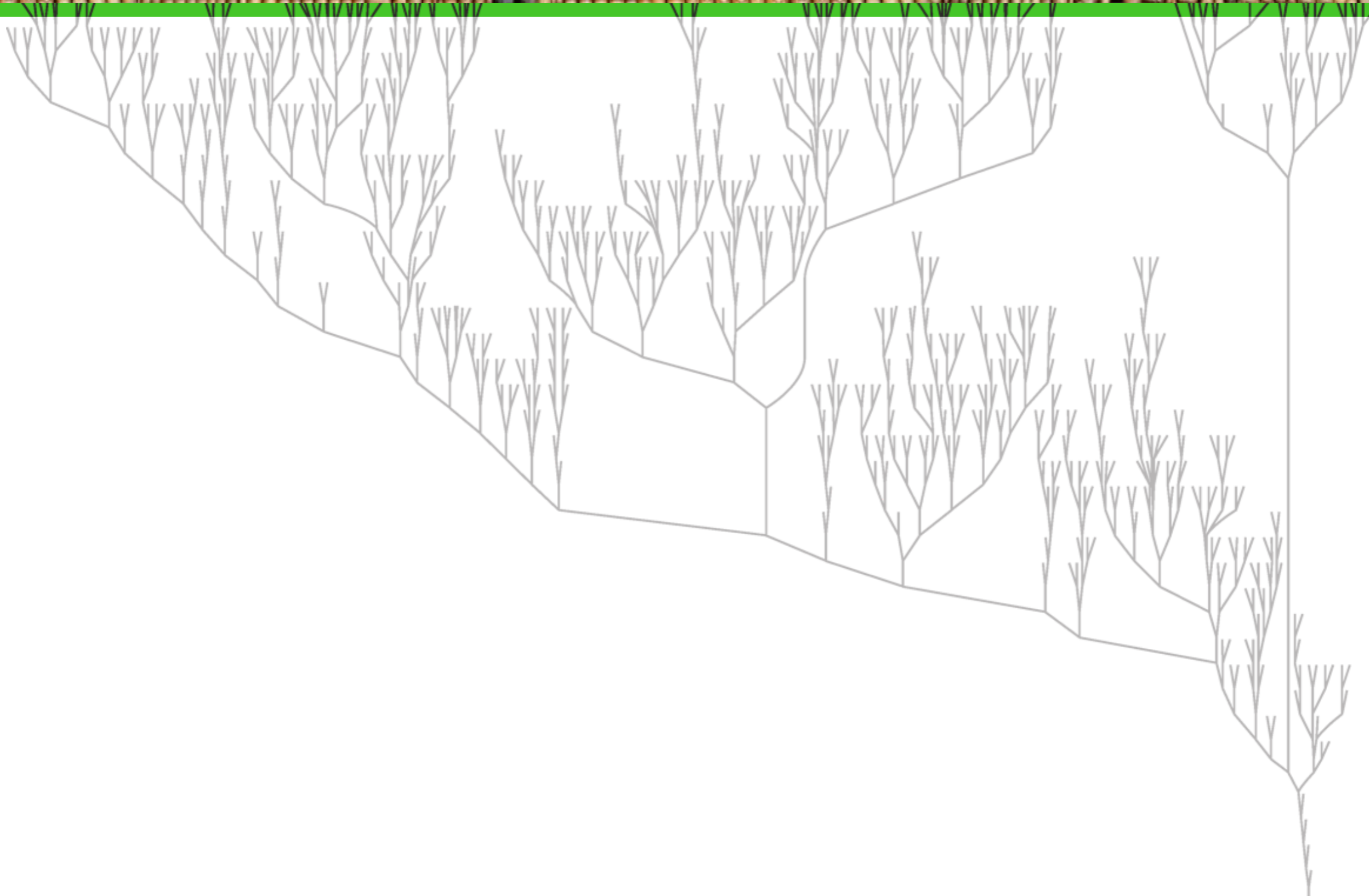
Now

Time →

Origin of Life



Now



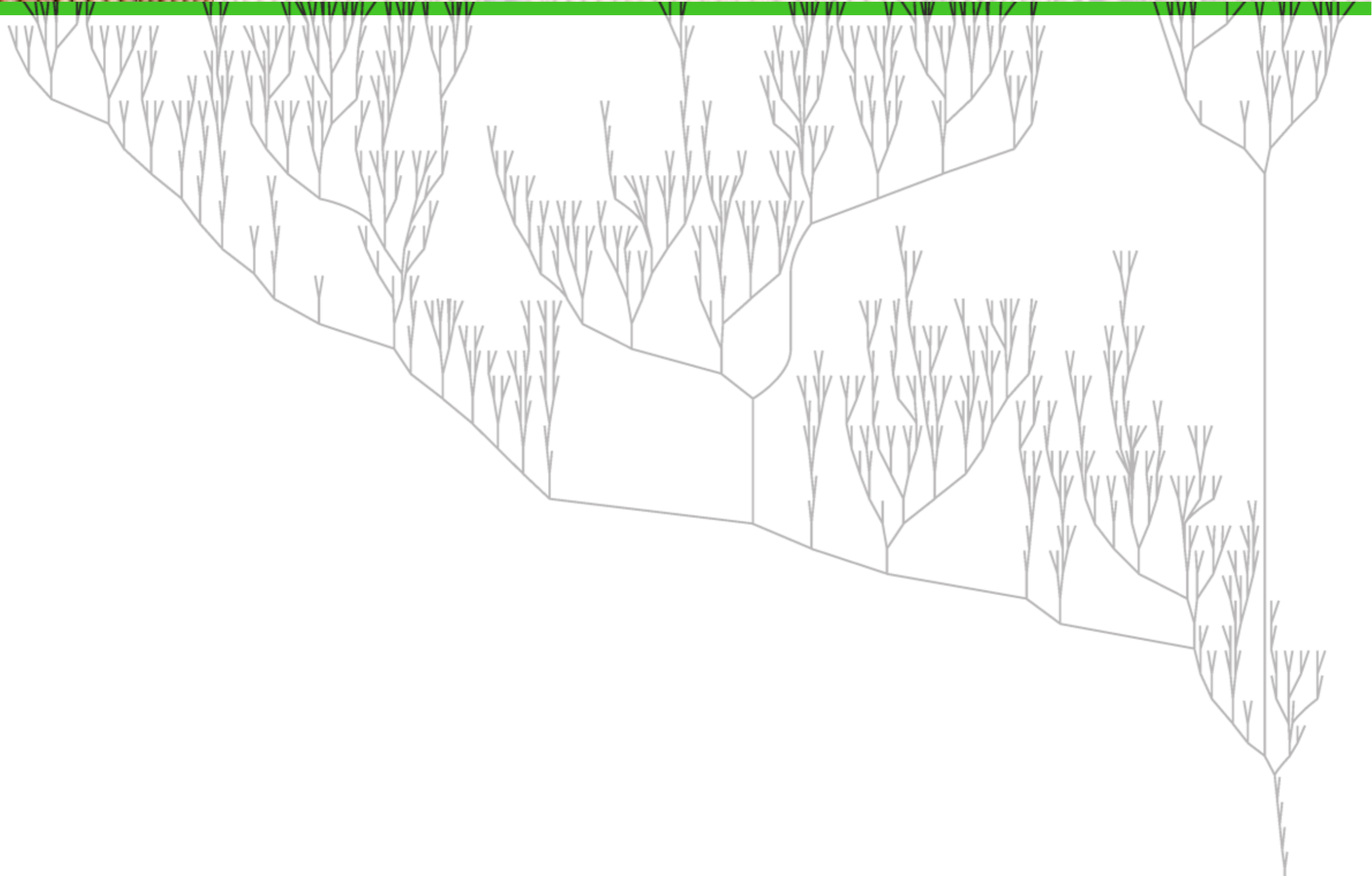
Time →

Origin of Life

**1,000,000  
described**

**5,000,000 – 10,000,000  
undescribed**

**Now**



**Time →**

**Origin of Life**



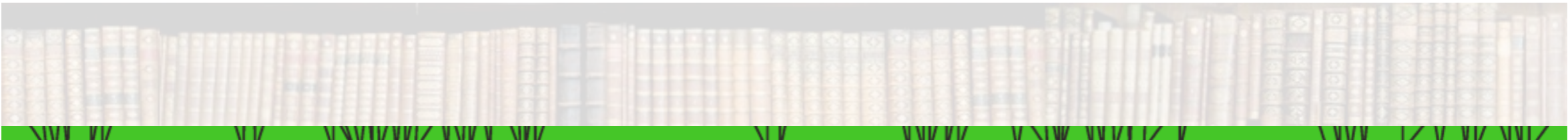
Now



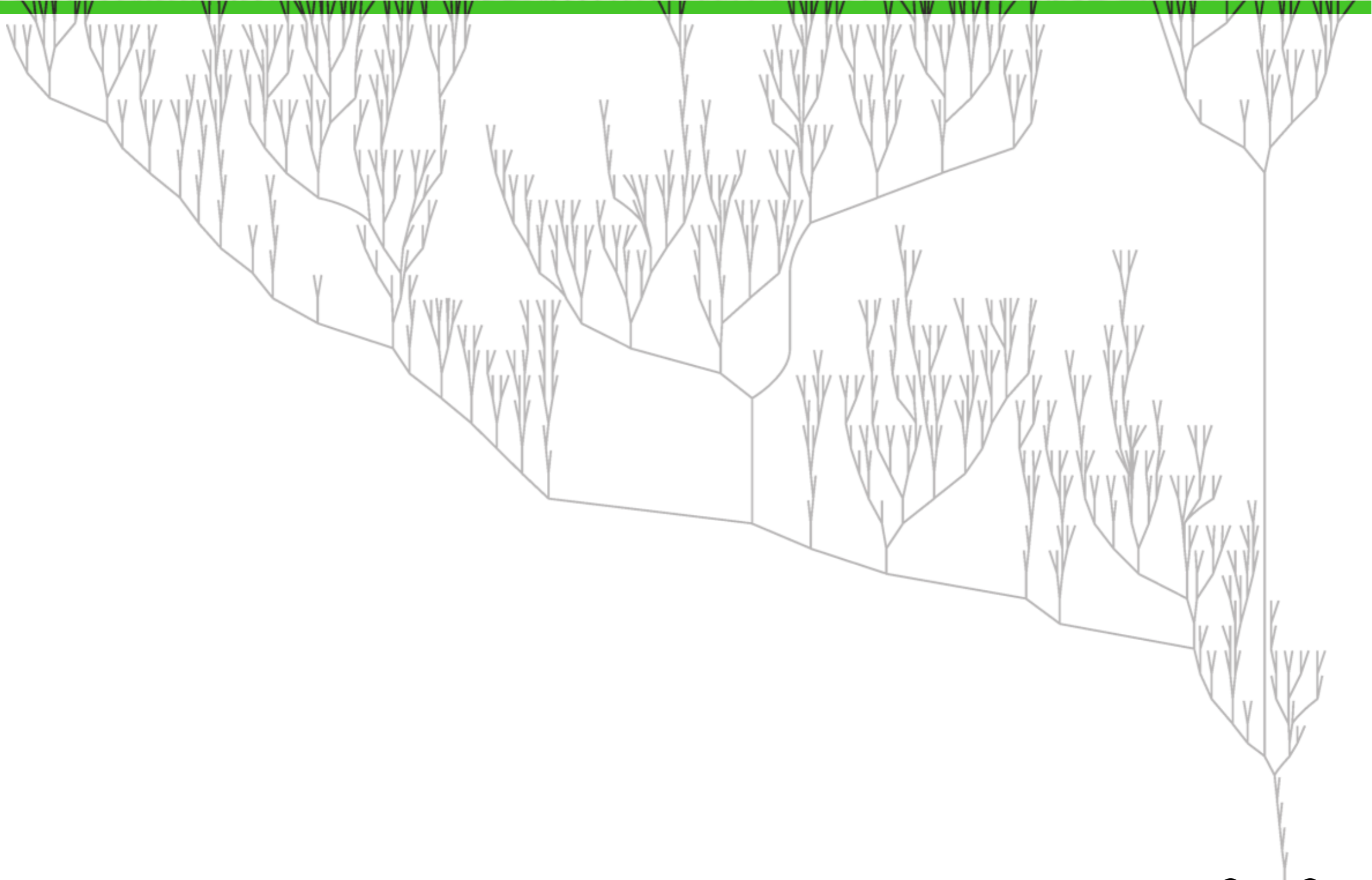
Time →

Origin of Life





**Now**



**Time →**

**Origin of Life**

# SUMMARIZING

- Decide what to say
- Outline points and slides
- Little text, many images
- Make form fit function
- Be concise – trim

**“Perfection is achieved,  
not when there is nothing more to add,  
but when there is nothing left to take away.”**

*-Antoine de Saint-Exupéry*