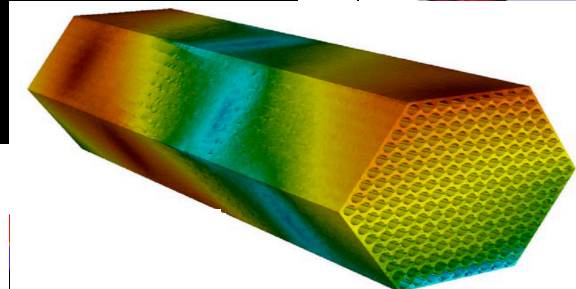
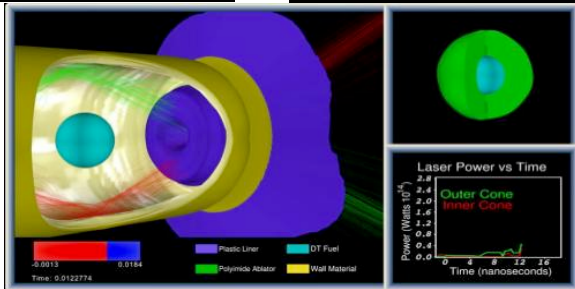
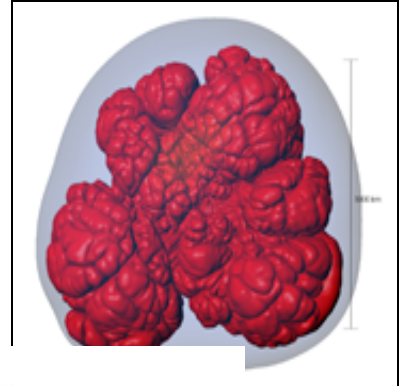
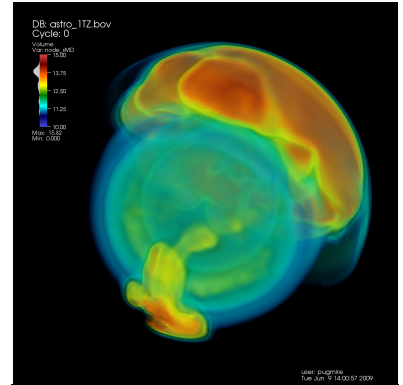
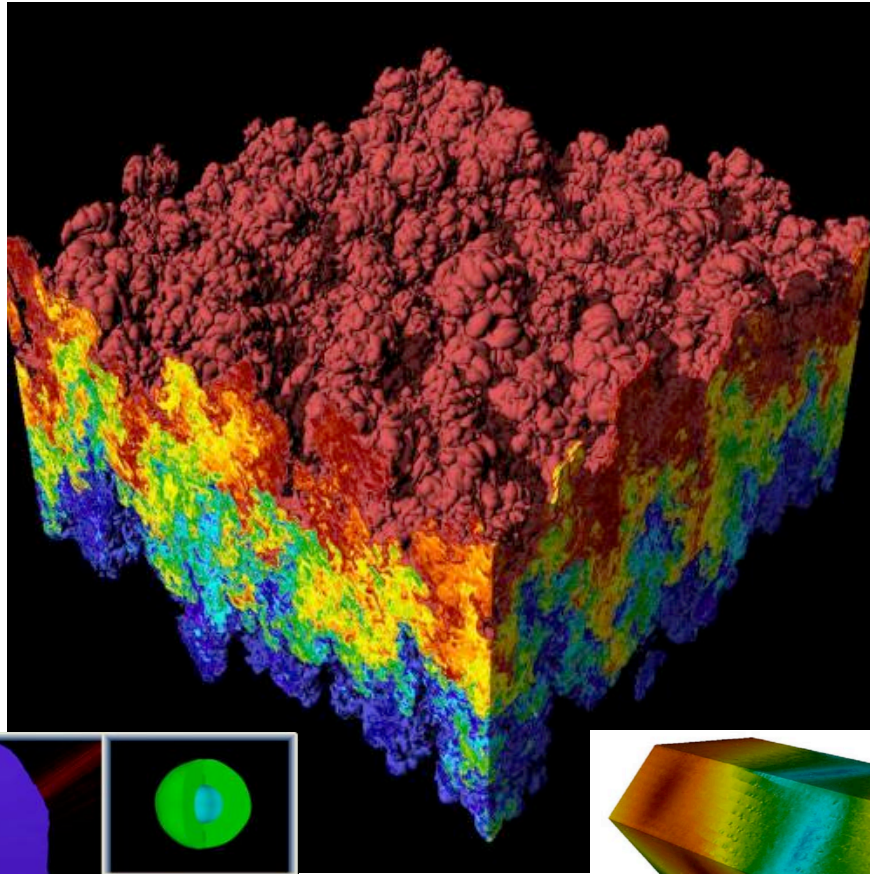
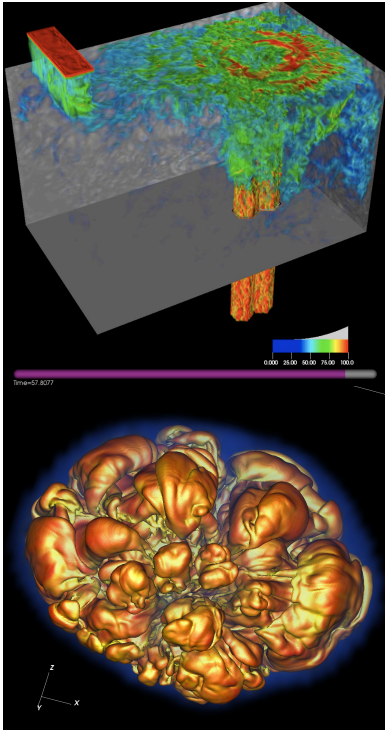


CIS 441/541: Intro to Computer Graphics

Lecture 12: Final Projects



May 13, 2021

Hank Childs, University of Oregon



Office Hours

✓ Published

Edit



How to access Office Hours

Hank Childs

[All Sections](#)

Apr 4 at 2:02pm

Hi Everyone,

We currently have an asymmetry for accessing Hank and Abhishek's Office Hours.

As of now, Abhishek's are always at:

COVERED UP (THIS IS POSTED ONLINE)

And Hank's are accessible via the Zoom Meetings area in Canvas.

Let's chat on Tuesday about the most standard way to do this.

Finally, here is the OH schedule again:

Monday (Abhishek): 10am-11am

Tuesday (Abhishek): 945am-1045am

Wednesday (Hank): 230pm-330pm

Thursday (Abhishek): 945am-1045am

Best,

Hank



Questions on 2B

Project #2B (7%), Due Monday May 17th



- Goal: modify *ModelView* matrix to create dog out of spheres and cylinders
- New code skeleton: “project2B.cxx”
- No geometry file needed
- You will be able to do this by rendering ~20 spheres and cylinders, each with their own transform



What Is the Correct Answer?



- The correct answer is:
 - Something that looks like a dog
 - No obvious problems with output geometry
 - Something that uses the sphere and cylinder classes
 - If you use something else, please clear it with me first
 - I may reject your submission if I think you are using outside resources that make the project too easy
 - Something that uses rotation
 - For me: the neck and tail
 - Something that animates
- Aside from that, feel free to be as creative as you want ... color, breed, etc.

Final Projects



Two Choices for Final Project



- Custom final project
 - You define the project, should be ~25 hours of work
 - Present project to class/judges on Finals Week
- Pre-defined projects
 - Pick three 8-hour projects from a menu of 4-6 projects

- Whether you do custom or pre-defined, you must attend the final period and watch the presentations
 - -4 points if you skip

Final Project: 30 Points



- Pre-defined: 25/30 points
 - No option to do extra and get 30/30
- Custom:

Project type	Score	Historical trend
Excellent	30	~1/3rd
Very good	25.5-29.5	~1/6th
OK	25	~1/6th
Problem	16-25	~1/3rd

Pre-Defined Projects



- Planning on having 4-6 pre-defined projects
- You choose 3
- On Tuesday May 18th, we will release project 2C
 - Likely: view manipulation from keyboard events
- On Tuesday May 25th, we will release the rest of the projects
 - (possibly called 2D, 2E, 2F, etc.)
 - These projects are TBD, but likely to include topics such as: texturing, physically based rendering, mirrors

Custom Project Ideas



- Implement a game
- Implement a screen saver
- Build a model of something
- Implement a neat rendering effect
 - Many folks try ray tracing

- ... Will show examples in a few slides

Custom Project Proposals



- If you want to do a custom project, please send me a proposal
- “Deadline”: ideally Tuesday May 18th
- Why?
 - Get the scope right
 - Make an agreement early on
 - Protects you and me
- Important concept: minimum viable deliverable
- Proposal can be whatever length you see fit
 - One paragraph is fine

Remaining Lectures



- In support of project 2C/2D/2E/...
- In support of custom projects
 - (Ray tracing lecture)

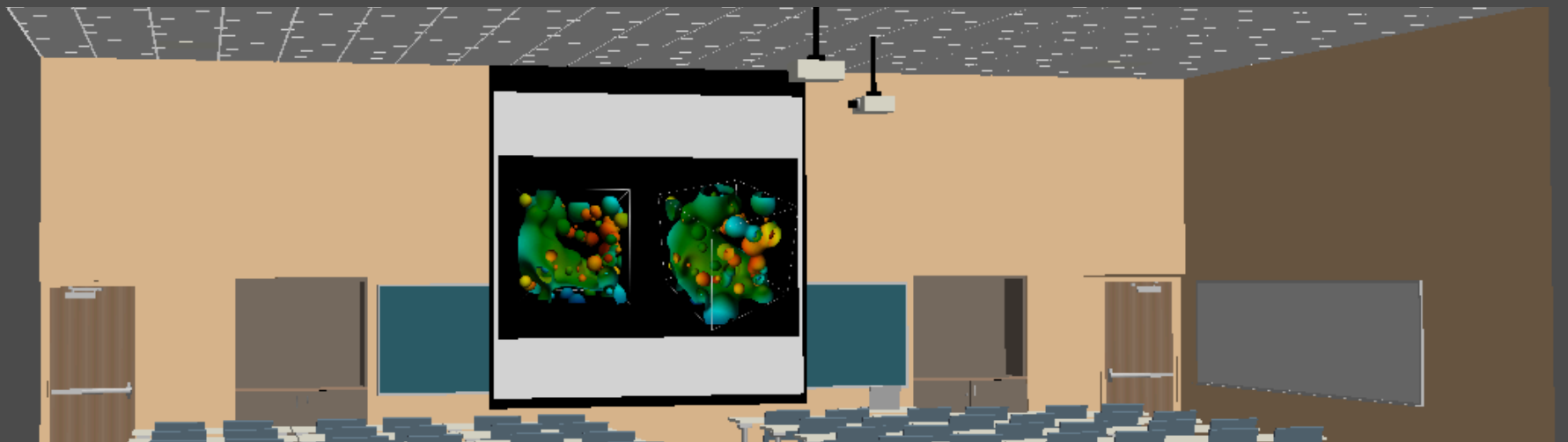
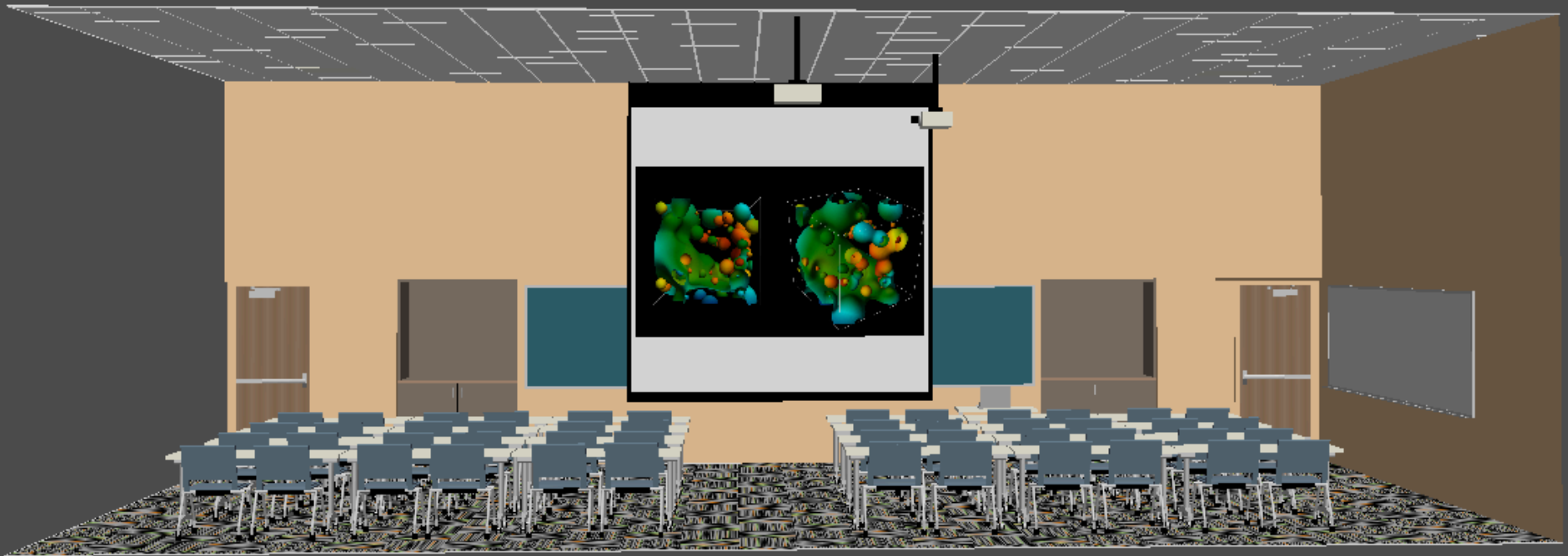
Plan – Parentheticals Are Likely to Change

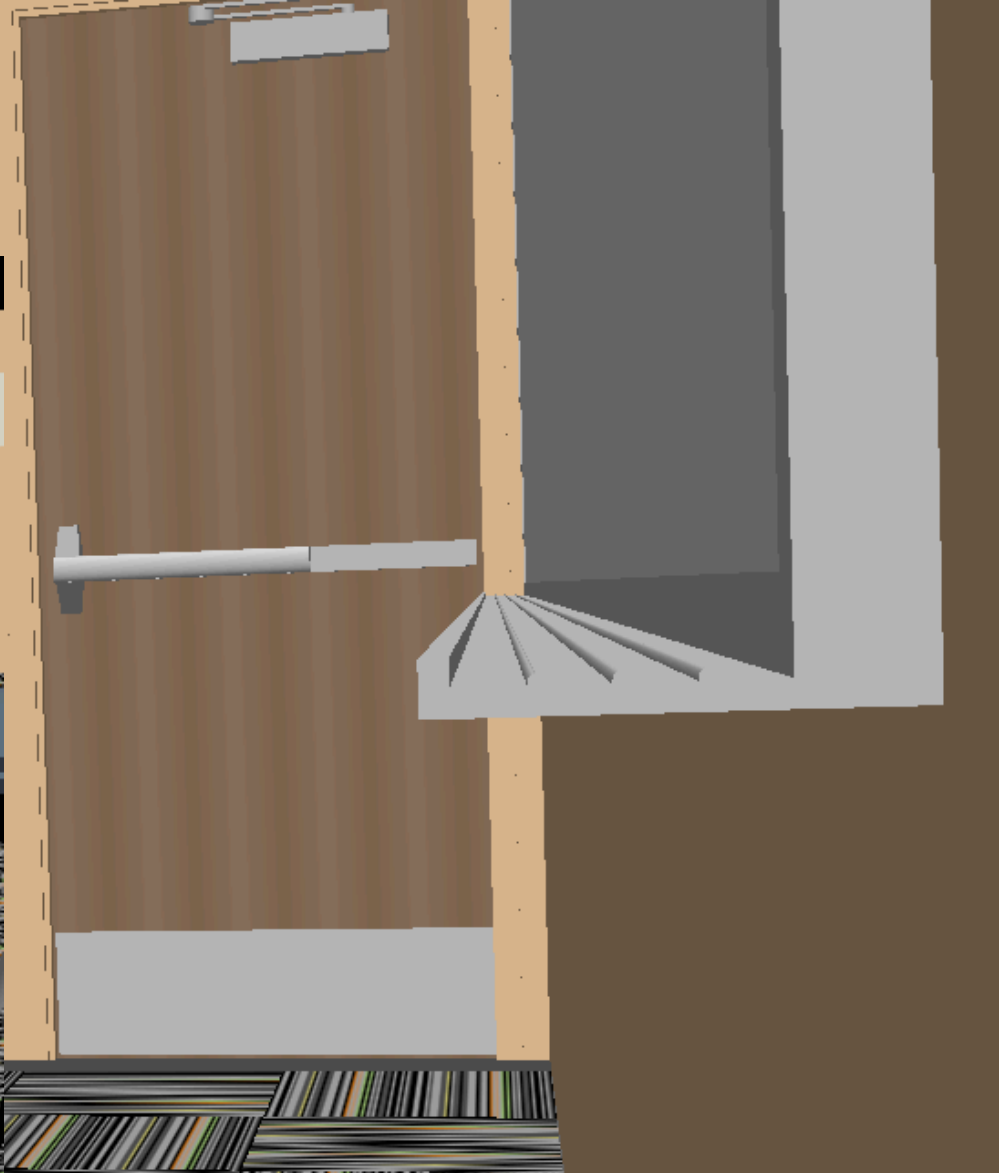
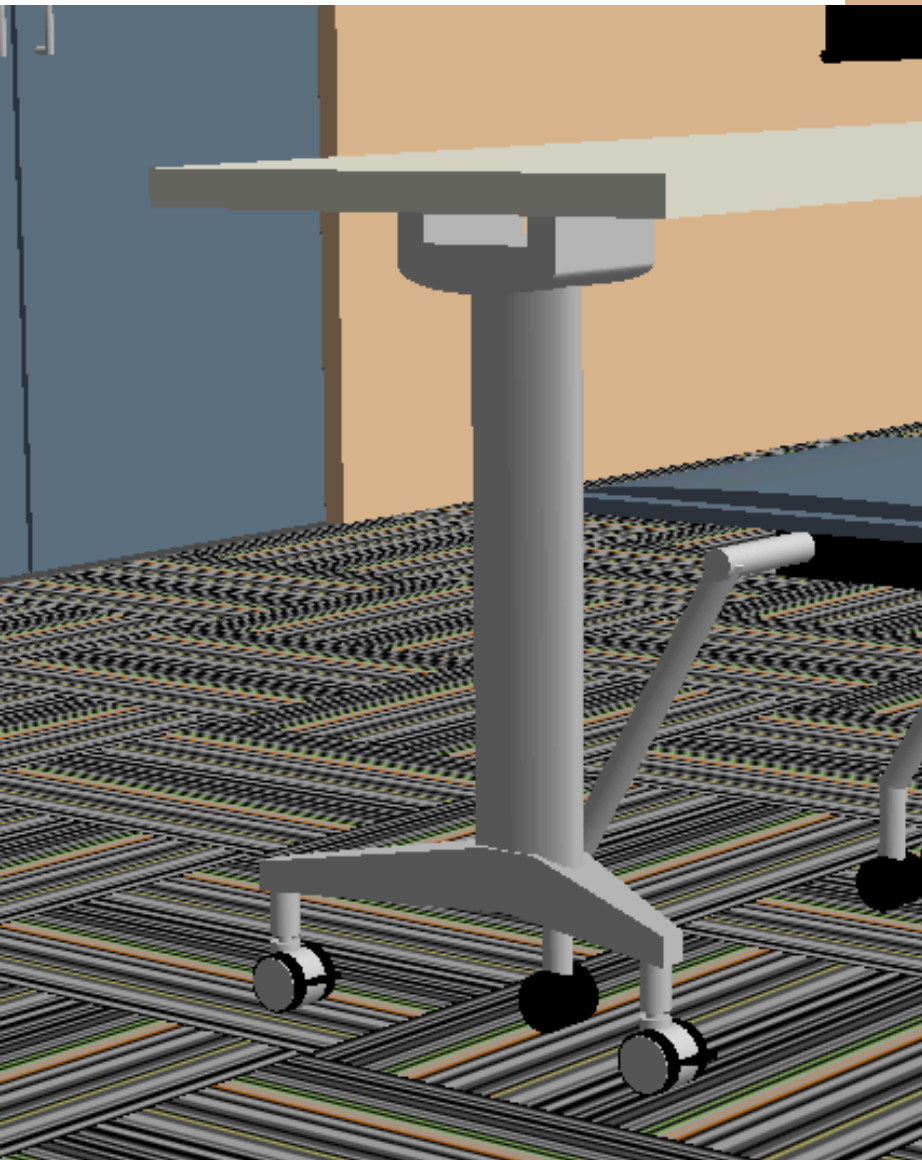


- This went well before, let's do it again

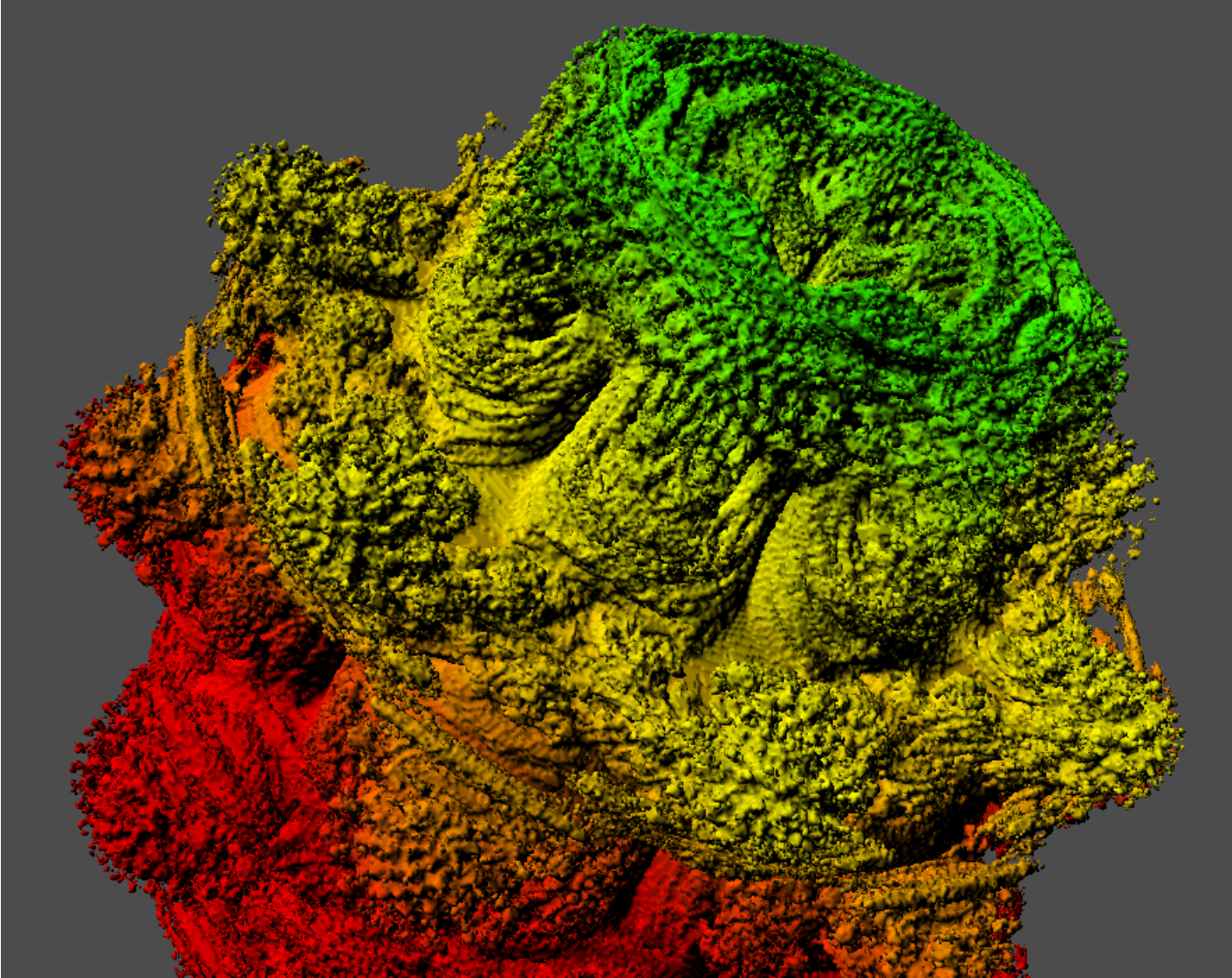
Week	Sun	Mon	Tues	Weds	Thurs	Fri	Sat
8		2B due	Lec13 (mouse+camera) 2C avail Proposals due		Lec14 (ray tracing) Quiz 4 (GL)		
9			Lec15 (textures) 2D, ... avail		Lec16 Quiz 5 (rasterization)		
10			Live code		Quiz makeup		
Finals Week			Final Projects due All other work due: 1A-1F, 2A- 2B not accepted after this point				

Jordan Weiler



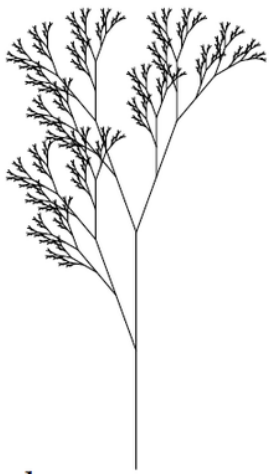


Charles Markello

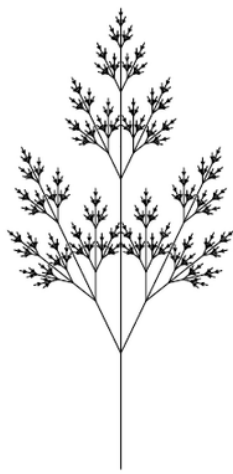


Andrew Cvitanoich

Lindenmeyer Systems



d
 $n=7, \delta=20^\circ$
 X
 $X \rightarrow F[+X]F[-X]+X$
 $F \rightarrow FF$

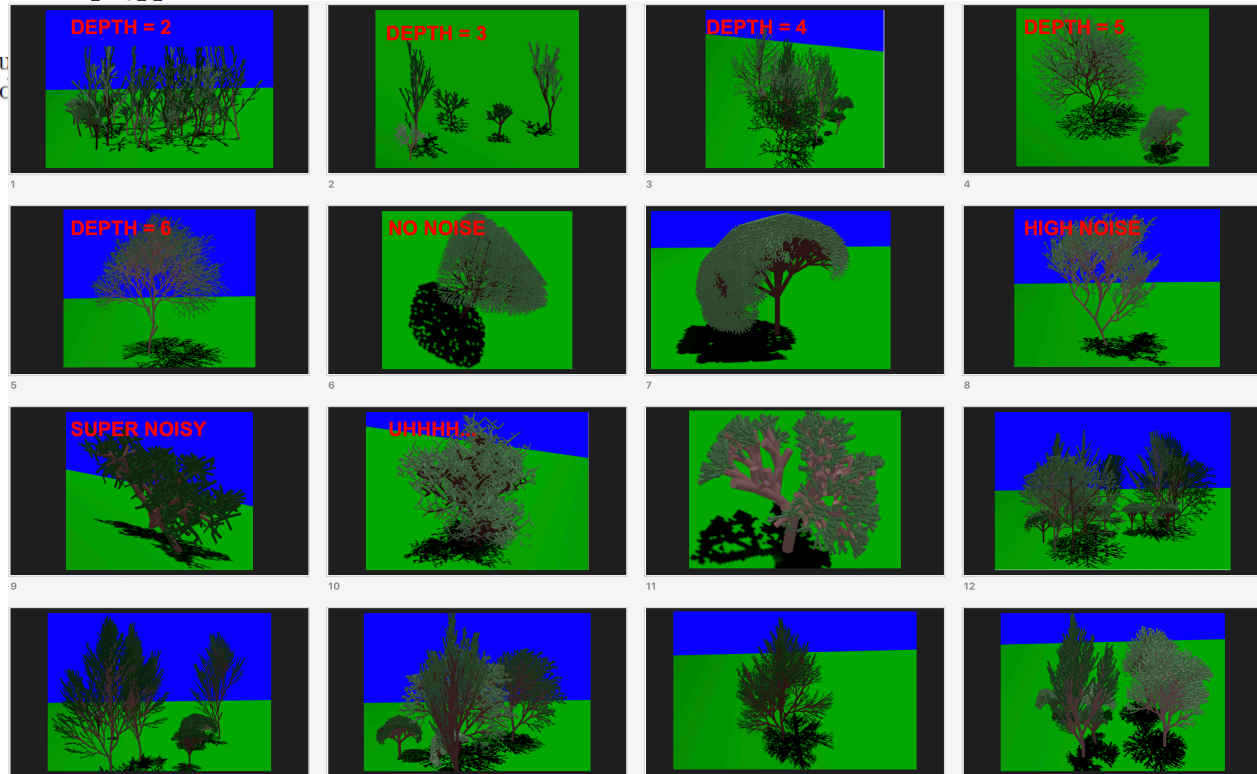


e
 $n=7, \delta=25.7^\circ$
 X
 $X \rightarrow F[+X] [-X]FX$
 $F \rightarrow FF$



f
 $n=5, \delta=22.5^\circ$
 X
 $X \rightarrow F-[[X]+X]+F[+FX]-X$
 $F \rightarrow FF$

Figure 1.24: Examples of plant-like structure systems. L-systems (a), (b) and (c) are edge-rewriting. (d), (e) and (f) are node-rewriting.



Max Kohl Movie



□ <https://www.youtube.com/watch?v=AT8x7UWxVtg>

Willem Jager Movie



□ <http://youtu.be/pGImBA0l2Ko>

Mingyao Liu



Brad Syrie

