

MATH-GA.2840-004:  
Written and Oral Presentation  
Lecture 1: Oral Presentations

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# Examples of Oral Presentations

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## Discussion Questions

1. Give some examples of oral presentations
2. Differences and similarities among them?



# Examples of Oral Presentations

- ▶ Seminar talks
  - ▶ Length: 30 minutes to 1 hour
  - ▶ Audience: 10-30; graduate students, researchers in the field
  - ▶ Goal: Share new research work (in some detail)
- ▶ Conference talks
  - ▶ Length: 10 to 30 minutes
  - ▶ Audience: ??; graduate students, researchers, nonexperts
  - ▶ Goal: Share new research work, ...
- ▶ Teaching
  - ▶ Length: 50 to 110 minutes
  - ▶ Audience: 5-hundreds; undergraduates, graduate students, ...
  - ▶ Goal: Help students learn
- ▶ Elevator talks
  - ▶ Length: < 5 minutes
  - ▶ Audience: ??
  - ▶ Goal: Effectively communicate key ideas in a short amount of time

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Adapt to the format, time/length, and other restrictions

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To do this,

- ▶ **Know your audience**
- ▶ Be mindful of the goals of the presentation  
Adapt to the format, time/length, and other restrictions
- ▶ **Less is more**  
Choose a small number of key ideas to emphasize, mention them early and reiterate them.

# Today: Ingredients of a Good Oral Presentation

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## Sample Talk

Dennis Wildfogel, *How big is infinity?*

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## Discussion Questions

1. Who are the intended audience for this talk?
2. What were done well?
3. What could be done differently or improved?
4. Overall, is this a good talk? Why or why not?



# Basic Ingredients of a Good Oral Presentation

- ▶ Care
- ▶ **Motivation & context**
- ▶ A small number of key ideas
- ▶ Content that is communicated effectively
- ▶ Summary/Take-home ideas

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- ▶ Summary/Take-home ideas



# Basic Ingredients of a Good Oral Presentation

- ▶ Care
  - Be excited; engage with the audience
- ▶ **Motivation & context**
  - Why should the audience care about your work/talk?
  - Why are your results interesting/important?
- ▶ A small number of key ideas
- ▶ Content that is communicated effectively
- ▶ Summary/Take-home ideas

## Example 2

A graduate student is to present 10-minute contributed talk at the Joint Math Meetings, in a session with loose theme. They are interviewing at JMM for teaching jobs.

Audience?

Goals?

Length/Format?

## Example 3

William Dwyer, *Introduction to operads*

<http://www.msri.org/workshops/685/schedules/17876>

Audience?

Goals?

Length/Format?

# Exercise: Elevator Talks

Prepare a 3-minute elevator talk for one of the scenarios below.

1. Topic: Your current research project
2. Topic: What is [your favorite mathematical field/topic] ?  
(For example: What is “Linear Algebra” ?)

Audience:

- (a) An expert in your field
- (b) A researcher whose expertise is not in your field
- (c) A first-year graduate student in your dept.
- (d) An undergraduate student in a Calculus 1 class
- (e) Your neighbor