

# Signal Analysis

## Final Project:

### Can you hear the shape of a room?

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Due: Dec 13, 5:00pm

#### Timeline:

- 1) Submission of team names and members: Nov 9, 5:00pm
- 2) Data acquisition deadline: Nov 23, 5:00pm
- 3) Final report deadline: Dec 13, 5:00pm

#### Project description:

- 1) Find out what the shape of the Bunker Auditorium (subject to change) sounds like. Plot it. Describe your approach.
- 2) Find out what the shape of the Metals Hall (subject to change) sounds like. Plot it.
- 3) Which of the two is a better venue for giving a lecture and why?
- 4) How would Mr. Mackey sound like in the Bunker Auditorium (assume that you are not allowed to play and record these sounds in the Bunker Auditorium)? Use the .wav files given. Describe your methodology. Plot it.

#### Additional instructions:

- 1) Work in teams of 3
- 2) Report (including figures) cannot exceed 2 pages
- 3) In the report, briefly describe what role each member played
- 4) The report should include a sketch of the acquisition in each venue
- 5) Submit any sound clips as .wav files