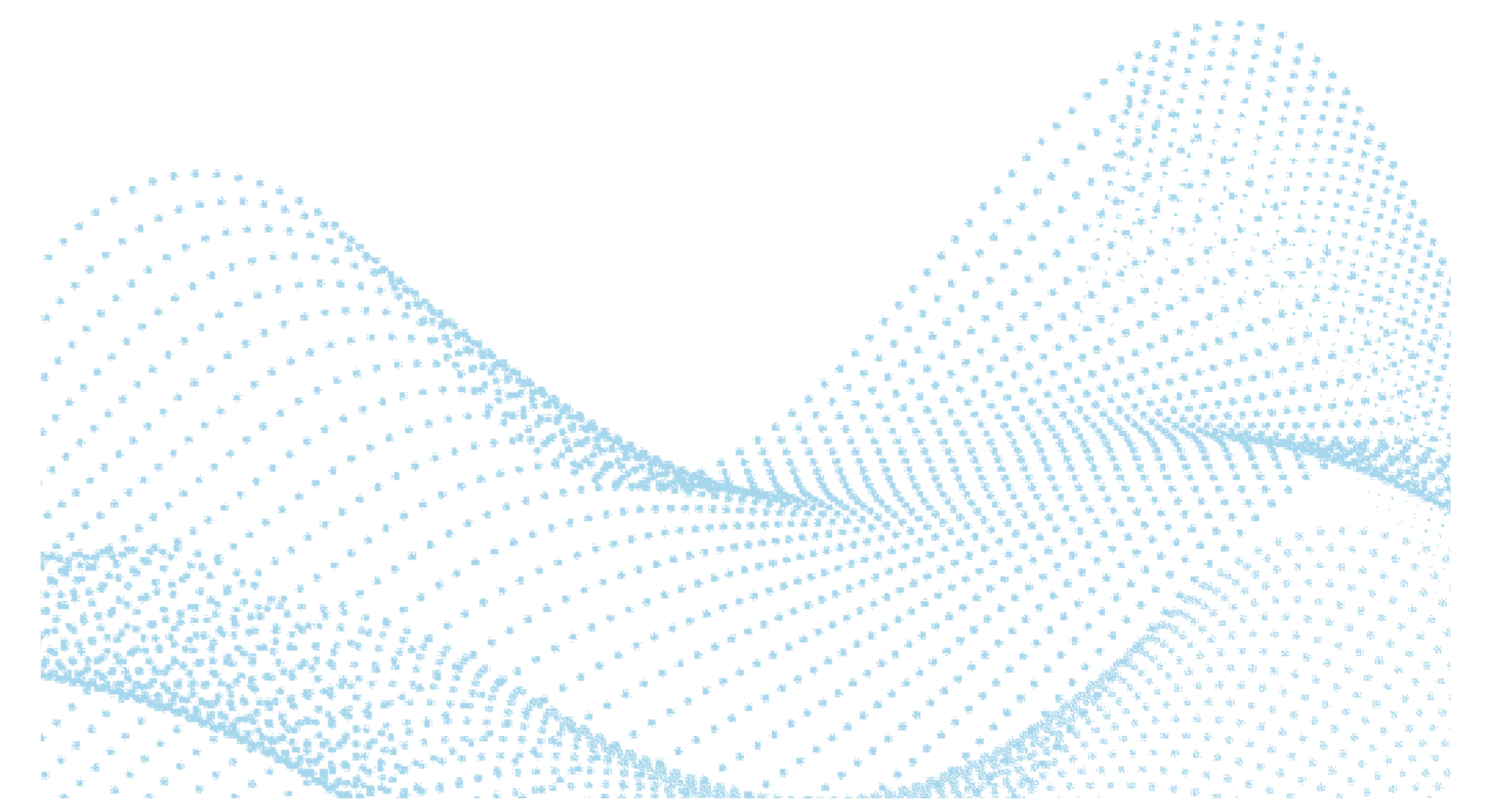


DON'T STOP ME NOW: Gender Attitudes in Academic Seminars Using Machine Learning

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1. Main Idea of the Paper

- Men and women diverge in attitudes towards different life dimensions.
- One way in which those attitudes manifest are through the conversation dynamics.

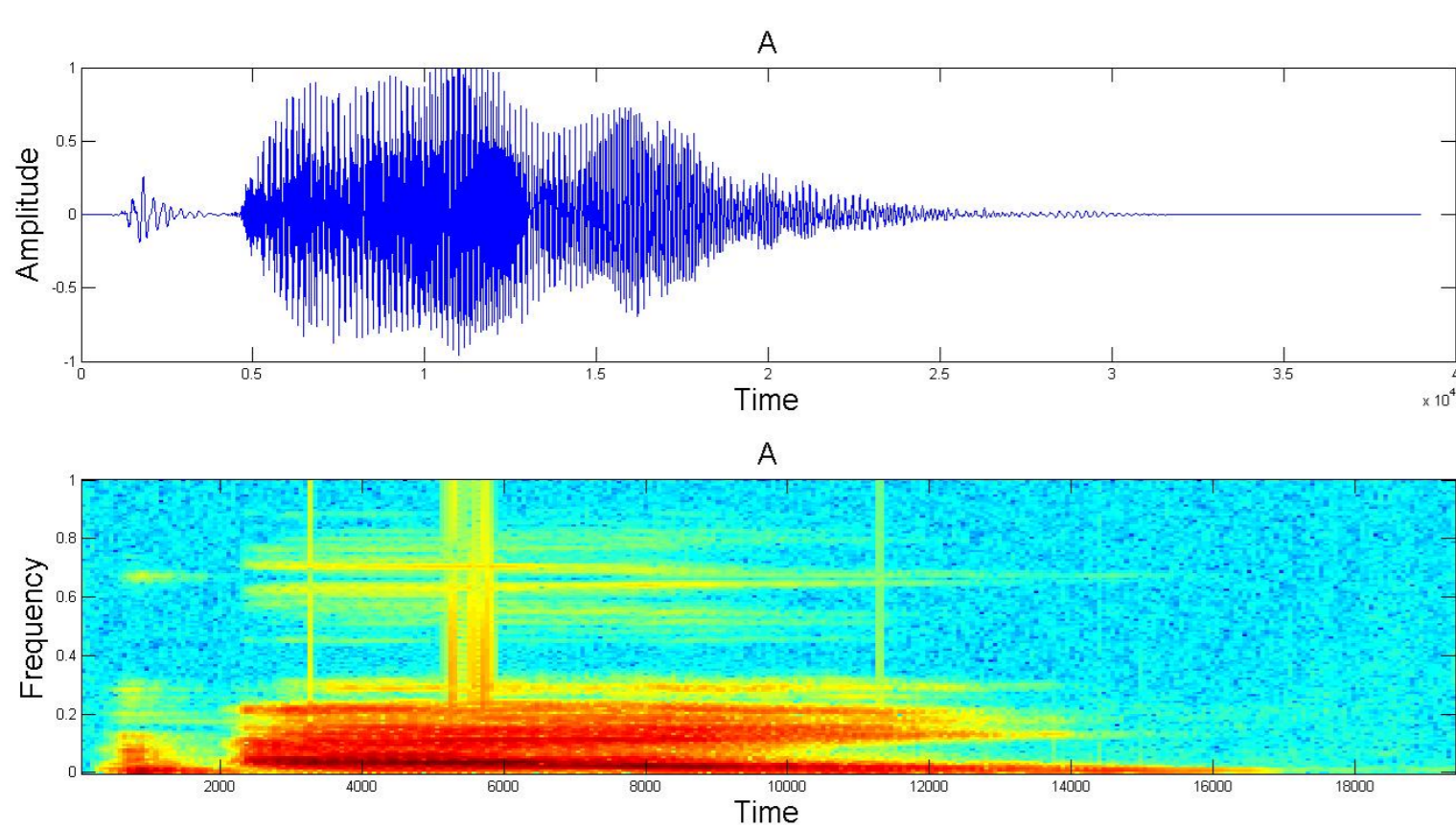
In that context, a widely cited notion is that men interrupt women more than women interrupt men

⇒ In the paper I show evidence disputing this idea.

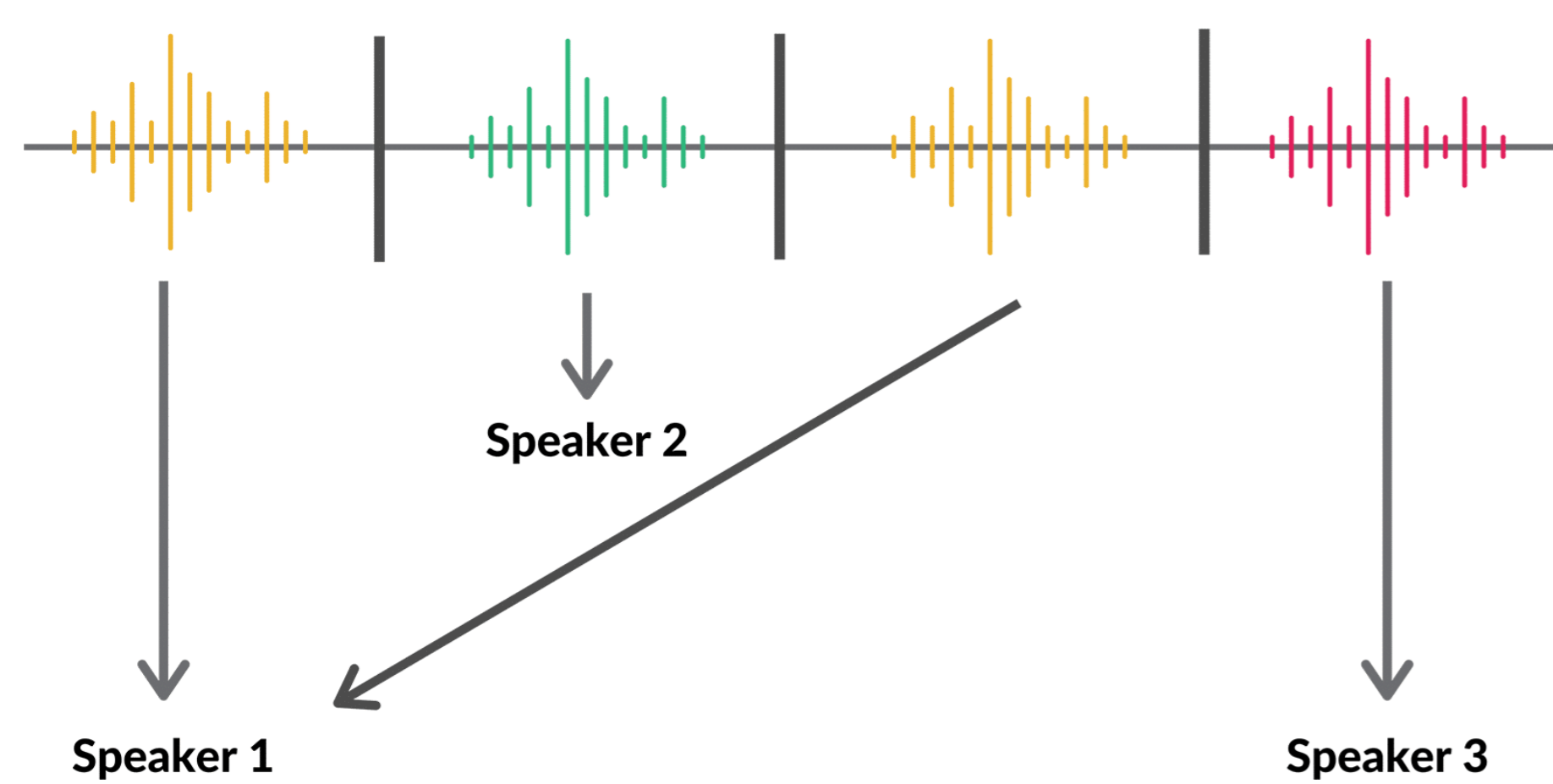
- I do that by exploiting the virtualization of academic seminars due the 2020 COVID-19 outbreak → I focus on econ. seminars.

2. How?

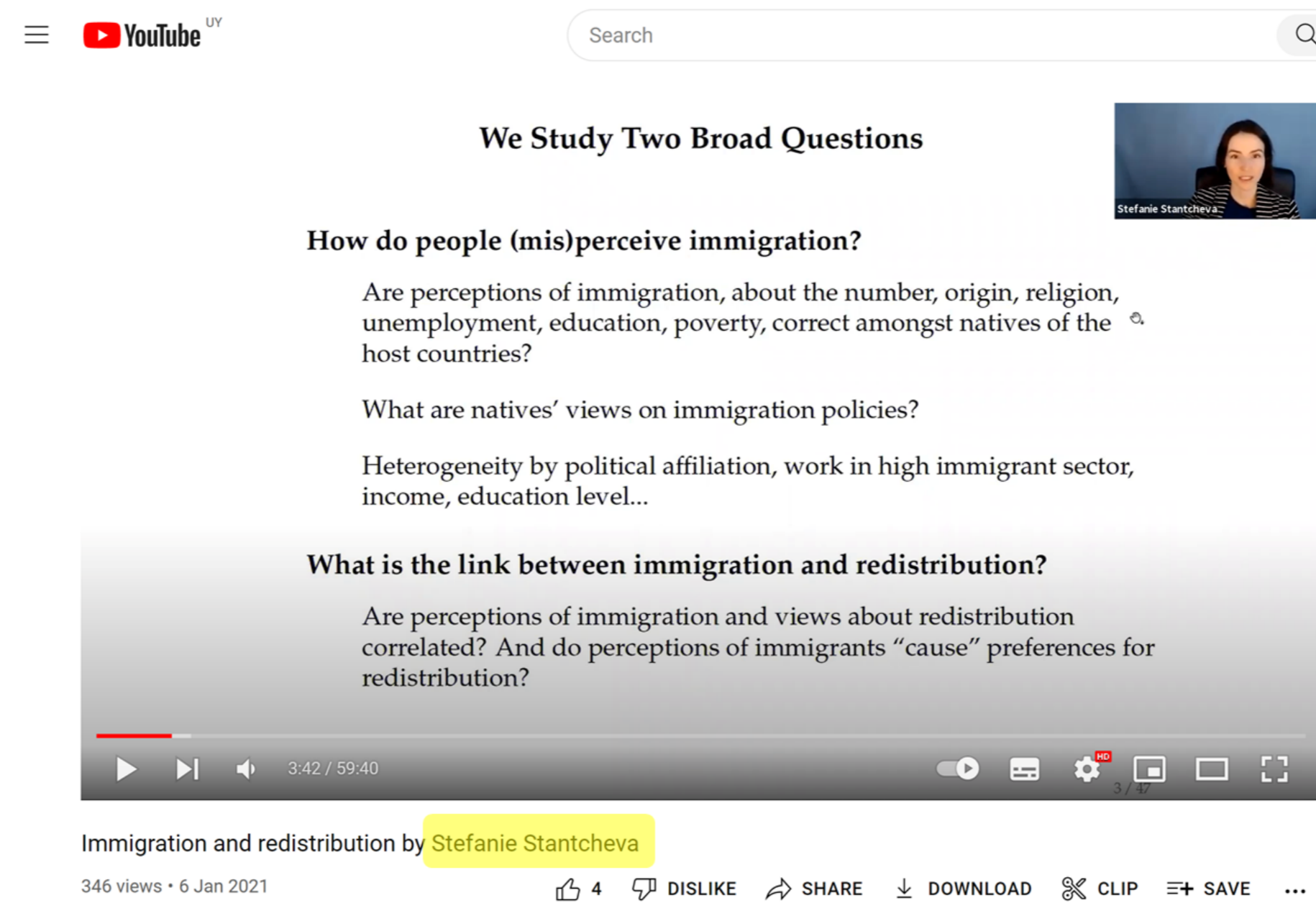
- **Data:** YouTube web-streamed seminars between 2020 and 2023 in different economics fields.
- 2,046 seminars featured by presenters, mostly from the top 100 best ranked universities worldwide.
- I analyze the audio wave constructing something called Mel Frequency Cepstral Coefficients (MFCC), a commonly used representations of the vocal tract.



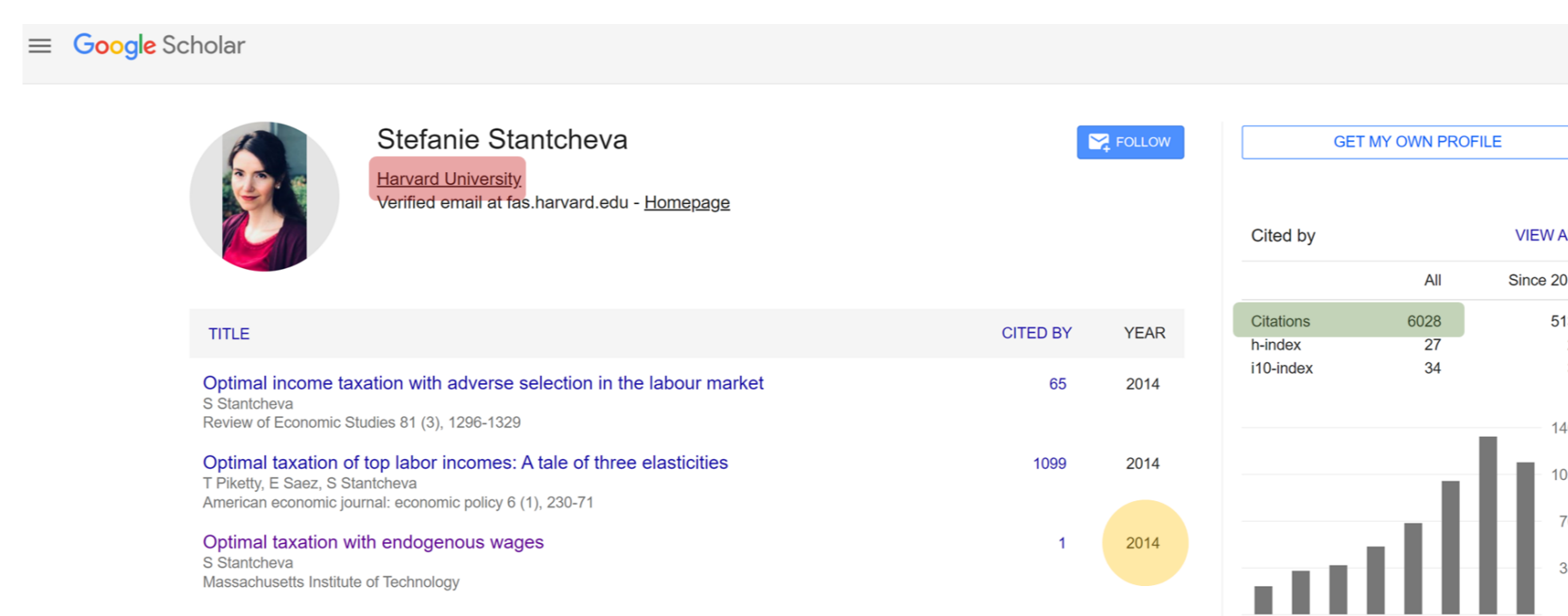
- And with that I construct a map of all the speakers in the seminar (something called "speaker diarization")



- With the voice of each of the identified speakers, I predict their genders using CNN.
- In addition I perform text analysis on the YouTube data.



- And I query the name of the presenter in Google Scholar to get citations, seniority and affiliation.



- Transcripts of the presentation were used to...

1. Discern question-based interruptions during seminars using the BERT NLP model.
2. Get seminar topics using topic modeling techniques.



- From where are those seminars?
 - Leading organizations that assembled or sponsored virtual seminar (e.g. AEA, IDEAS/RePEc, etc.)
 - Top organizations and universities that organized online seminars (CEPR, NBER, RES, etc.)

3. Econometric Model

$$Y_{p,s} = \beta_0 + \beta_1 \text{FemalePresenter}_{p,s} + \mathbf{X}'_p \gamma + \mathbf{Z}'_s \lambda + \beta_3 \delta_s + \epsilon_{p,s}$$

- $Y_{p,s}$ number of interruptions in a given seminar.
- X presenter characteristics (citations, seniority, etc).
- Z seminar characteristics (duration, topic).
- δ seminar series fixed effects.

Duration (in min)	62.3	Interruptions	10.8
Female presenters	35.3%	Different presenters	1,928
Total seminars	2,046	Only chair inter	10.1%

4. Results

	Variable	SE
Female presenter	1,785*	(0.925)
Duration	0.196***	(0.035)
Citations	-0.062	(0.051)
Seniority	-0.032	(0.039)
Topic	Yes	
Speaker's Dept. Locat.	Yes	
Seminar Series	Yes	
R^2	0.435	

- What happens when gender of interrupter is interacted with gender of the presenter?

	Variable	SE
Female presenter	1,290*	(0.719)
Female interruption	-0.167	(0.415)
Fem. Present x Fem. Inter.	3.575*	(1.923)

This suggests a dynamic where female attendees are more likely to interrupt female presenters.

Other results that you can find in the paper:

1. Female presenters are interrupted more often by speech overlap.
2. Female presenters are interrupted with more negative tones of voice.
3. Men ask more questions and make fewer comments to women presenters.
4. Female are interrupted earlier in their presentation.

5. Conclusions

- Yes, female present. are more interrupted.
- Those extra interruptions are not entirely due to men in the audience but to female.

Two possible reasons behind this:

1. Desire to **help**, sense of **community**, better **knowledge** of the topic.
2. **Convergence to man interruption**: women may feel more legitimated to take the floor from other women, not to help but to act as the community acts.