Using Overleaf and Beamer for Economics Presentation

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Overview

Topic (Research Question)

How to use overleaf and beamer to make an economics research presentation?

- (Methodology) I use different LaTeXpackages and third-party tools to show the audience how to use overleaf and beamer interactively in an applied economics research flow.
- (Results) They are happy.

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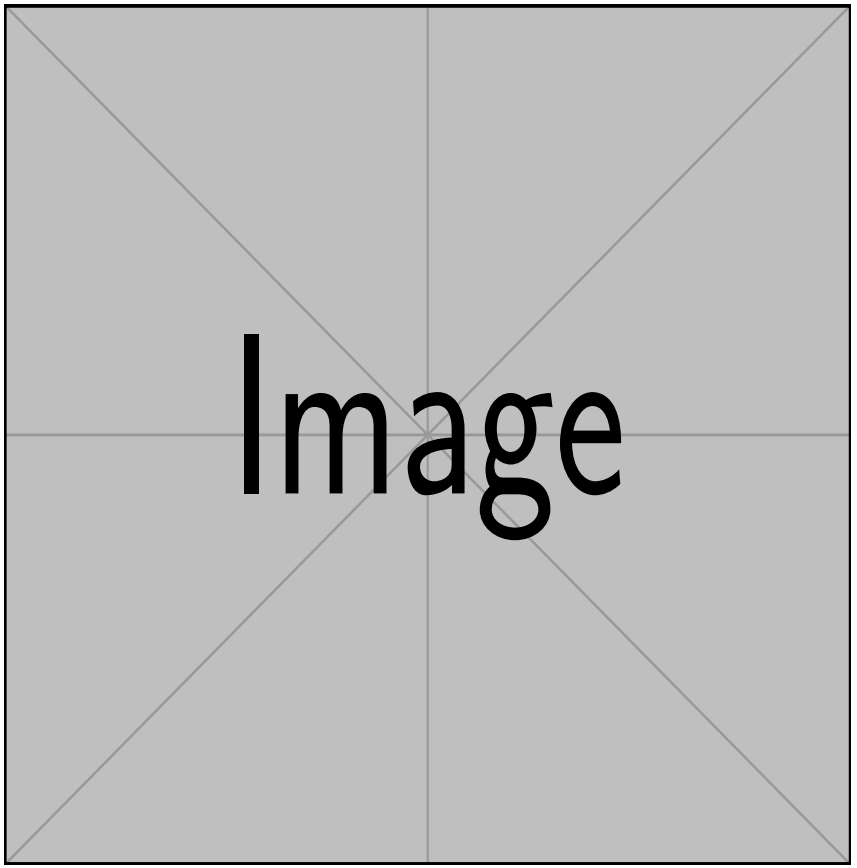
- second item bla bla bla bla some more text bla bla
- third item bla bla bla bla some more text bla bla bla bla bla bla



Switch Gear

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Mathpix (Demo)

Definition (Schrodinger's equation)

$$i\hbar\frac{d}{dt}\psi(t) = H\psi(t) \tag{1}$$

Under these assumptions, an infinite-horizon decision problem takes the following form:

$$V(x_0) = \max_{\{a_t\}_{t=0}^{\infty}} \sum_{t=0}^{\infty} \beta^t F(x_t, a_t)$$

subject to the constraints

$$a_t \in \Gamma(x_t), x_{t+1} = T(x_t, a_t), \forall t = 0, 1, 2, \ldots$$

Theoretical Diagram

https://jackypacky.github.io/pgf-econ-graphs/guide.pdf
https://mirror.math.princeton.edu/pub/CTAN/graphics/pgf/base/doc/pgfma
http://static.latexstudio.net/wp-content/uploads/2016/06/tikzforeconomists-110619150244-phpapp01.pdf
click here contents page ▸ Algorithm ▸▸ Algorithm ◂ Theoretical Framework

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Algorithm

type brow : **int**$[M+1]$
type bcol : **int**$[N+1]$
type val : **real**$[k]$
type val_ptr : **int**$[K+1]$
type ind : **int**$[K]$
type ptr : **int**$[M+1]$

1 **foreach** *block row I* **do**
2 $\quad i_0 \leftarrow brow[I]$
3 $\quad r \leftarrow brow[I+1]$
4 $\quad$ Let $\hat{y} \leftarrow y_{i_0:(i_0+r-1)}$
5 $\quad$ **for** $b = ptr[I]$**to**$ptr[I+1]$ **do**
6 $\quad\quad J \leftarrow ind[b]$
7 $\quad\quad j_0 \leftarrow bcol[J]$
8 $\quad\quad c \leftarrow bcol[J+1] - bcol[J]$
9 $\quad\quad$ Let $\hat{x} \leftarrow x_{j_0:(j_0+c-1)}$
10 $\quad\quad$ Let $\hat{A} \leftarrow a_{i_0:(i_0+r-1),j_0:(j_0+c-1)}$
11 $\quad\quad$ Perform $r \times c$ block multiply,
$\quad\quad\quad \hat{y} \leftarrow \hat{y} + \hat{A} \cdot \hat{x}$
12 $\quad$ **end**
13 **end**

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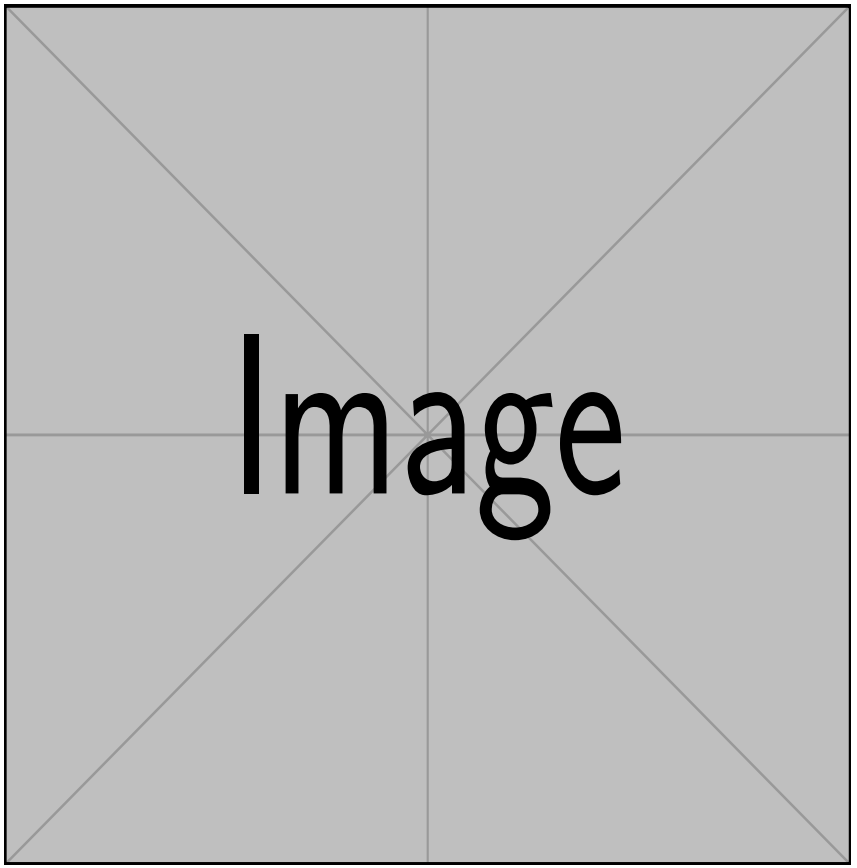

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Results

Table: Table caption

Treatments	**Response 1**	**Response 2**
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296

Jianxuan's STATA to LaTeXtemplate

A Standard Regression Table

	A		B	
	Weight (lbs.) (1)	Weight (lbs.) (2)	Price (3)	Price (4)
Mileage (mpg)	-108.432***	-91.220***	-49.512	21.854
	(9.346)	(8.822)	(86.156)	(74.221)
Car origin		-550.052***		3673.060***
		(110.908)		(683.978)
Weight (lbs.)			1.747**	3.465***
			(0.641)	(0.631)
Constant	5328.759***	5125.720***	1946.069	-5853.696
	(206.152)	(183.533)	(3597.050)	(3376.987)
Time Effects	No	No	No	No
Fixed Effects	No	No	No	No
Observations	74	74	74	74
R-squared	0.652	0.741	0.293	0.500

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Optimal Control Model (Pollution Cap)

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Discussion

Thanks

Thanks a lot.

Reference I