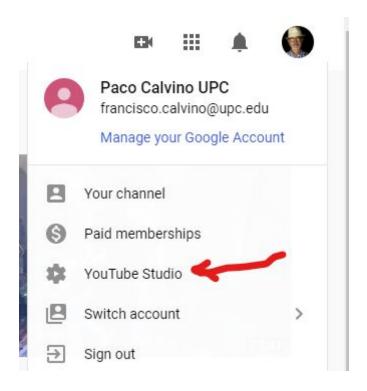
# Youtube Streaming

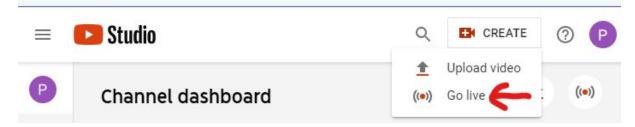
This is a short "tutorial" prepared by Jordi Freixa (Eng. Nuclear - Dept. Fisica - ETSEIB). It has been written in a very short time just to help as a "getting started" document.

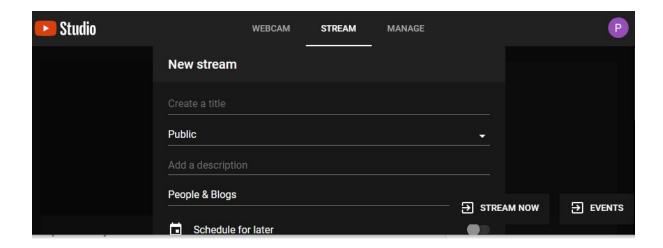
## Before you start:

Activate YouTube LiveStream

Please note that the first time you'll be asked to verify your account. The **activation should** be done 24h in advance to your first streaming.





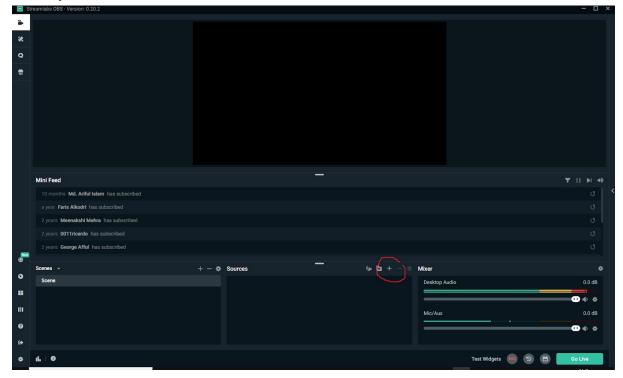


## requirements:

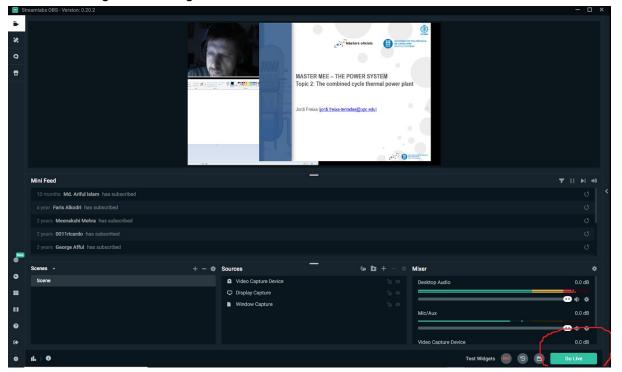
- Youtube account (can be linked to the Gmail account). It can also be your upc.edu account (ex. paco.calvo@upc.edu) -recommended for remote classes at UPC-
- To share the screen or other windows, you will need to install additional software. I recommend "streamlabs OBS". It is free and very much configurable.

#### **About Streamlabs OBS**

- install the software from <a href="https://streamlabs.com/">https://streamlabs.com/</a>
- Link it to your YouTube account during the installation
- Next step is to configure how your streaming will look like. Open Streamlabs obs and you will see that



 add sources to your screen (plus sign marked in previous screenshot): you can add the webcam, a display, a particular window and other sources and widgets. You should get something like this:



- When you are ready you can hit the go live button and the emission will start
- You will see the chatroom on your right hand and some links to see it on youtube (like the students will see it) and also go to YouTubeStudio.

#### Method of access:

The class is streamed live or you can record it and post it later. You provide a link to the students and they can connect through YouTube.

#### interaction:

If you do live streaming, students can post comments in the chat room. You can address the questions if you want. There is about 1 minute delay in the streaming, this means that you see the questions with 1 minute delay.

## reproducibility:

The video is stored in Youtube and you can also edit it easily with the youtube tools: you can cut the beginning and the end or other parts quite easily.

## Technical possibilities:

The best part of this method is that you can configure what the students see with full flexibility. You can put the camera window in one side and the presentation in another and even additionally you can add yet another box with a white board. You can add widgets so the comments will be shown also in the video...

## Concluding remarks

Pros	Cons	Good for:
<ul> <li>Fully customizable</li> <li>High quality of the stream</li> <li>Final product can be stored and kept for future use</li> <li>No interruptions</li> </ul>	<ul> <li>Difficult to configure for the first time</li> <li>limited interaction with the students (only chat comments and with delay)</li> </ul>	<ul> <li>Classic Master class with many students (+15)</li> <li>recording short explanations for future usage</li> </ul>