# EuroScipy 2013 - A small python appetizer

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# Materials

- Introduction and notebooks: https://github.com/odebeir/euroscipy2013-python-appetizer

# Dependencies

- Anaconda: https://store.continuum.io/
- In case of no network: grab one of the three USB-Keys
  - They read *XXXXX*
- to test serial interaction the python serial module should be installed (not needed for the tutorial)

```
$ pip install pyserial
```

# About The Speaker

- Olivier Debeir from Brussels, Belgium
- image processing professor at the Université Libre de Bruxelles
- main research interest topics are biomedical image processing and pattern recognition

# Outline of this tutorial

- introduction to Python language
- some practical examples
- demo of an interface with the real world

# Audience interaction

- during the tutorial interaction will be required from the audience,
- an interactive tool should be available during the session at a given IP address (see low tech board),
- be sure to have a webpage open at the given address (eventually refresh the page for each new question)
- test : open a webpage at the given address: `http:/XXX.XXX.XXX.XXX:8000`
- answer the following question:
  - A: Yeah it works !
  - B: No, it does not :-(

# About the Material

- **Python**
  - An IPython notebook demonstrating the Python language basics
  - A demo of different tools available in a scientific python environment
- **Examples**
  - IPython notebooks

# How to Follow

- to start just follow the presentation
- after the general introduction on Python, you should be familiar with the environement and proceed with the following:
- grab the IPython notebook, try out the examples, work on the exercises, all from within the notebook.
- to start an interactive IPython session use the following command line:

```
$ ipython notebook --pylab=inline
```

- Alternatively: view the HTML and copy and paste the examples into an IPython shell or a Python file.
- remark :

  *exemples related to the serial interaction will of course not be functional (some specific HW is required here)*

# To continue

- you are invited to follow next tutorials (beginner's track)
  - *Array Manipulation with Numpy Valentin Haenel*
  - *Matplotlib tutorial by Nicolas P. Rougier*
  - *Scipy package tutorial by Philippe Gervais*
- complete scipy 2013 program is available at
  https://www.euroscipy.org/schedule/tutorials/