

# Project Group: Wireless Acoustic Sensor Network

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SS17

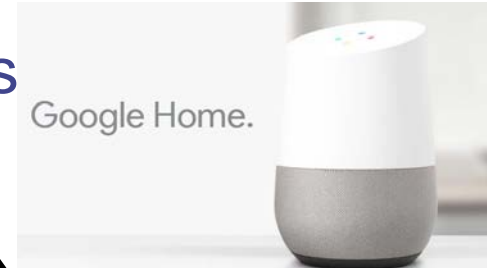
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# Introduction: Acoustic Sensors?

- IT Companies are targeting acoustic markets
  - Apple – Siri – 2012
  - Microsoft – Cortana – 2014
  - Amazon – Echo – 2015
  - Google – G-Home – 2016

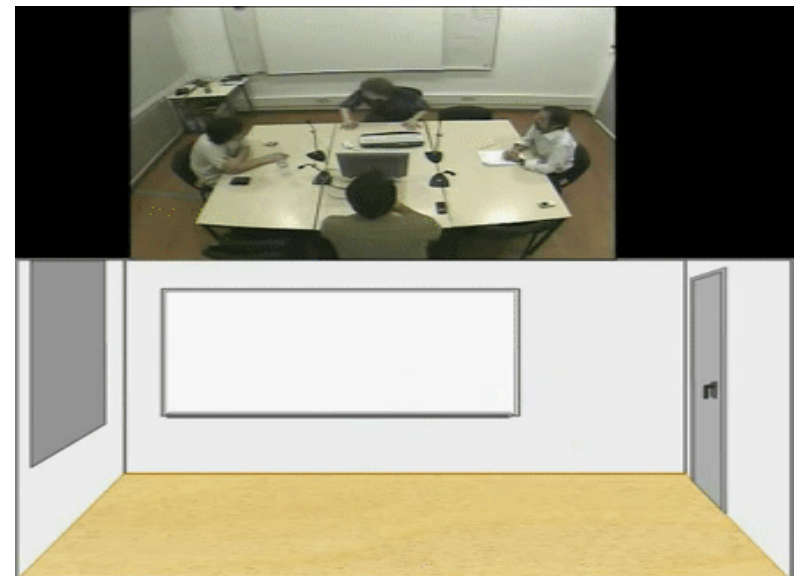
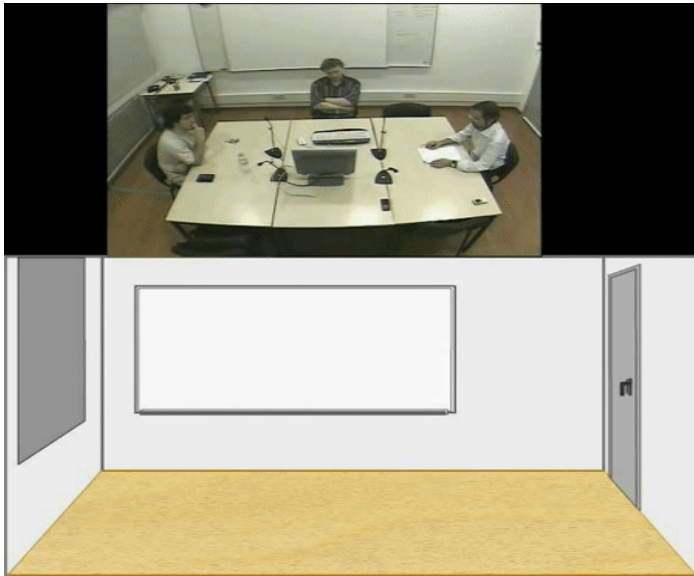


**What is next?**  
Wireless Acoustic Sensor Networks  
**(WASN)**



# Introduction: Why WASN?

- WASN opens the door for more applications
  - Echo Systems
  - Scene analysis
  - Source localization
- .... and many other IoT applications



*Gif inspired by UPC*



# What are the Goals ?

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- Gain an overview of existing networking protocols in WSN
- Develop a communication protocol between different applications/nodes (ex: REST API)
- Use real hardware (Raspberry pi) to develop an easy-to-use testbed for algorithms in WASN



**Linux**

# What are the Tasks?

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## What you will

Do	Not do
<ul style="list-style-type: none"><li>• Learn basics of WSN and how to control your sensors over the network</li><li>• Implement your own system architecture for communications protocols between sensors</li><li>• Develop a testbed setup on real hardware</li></ul>	<ul style="list-style-type: none"><li>• Develop signal processing algorithms</li><li>• Work on low-level hardware</li><li>• Work individually. At least you need guidance !</li></ul>

