



This presentation is released under the terms of the  
**Creative Commons Attribution-Share Alike** license.

You are free to reuse it and modify it as much as you want as long as  
(1) you mention **Séverin Lemaignan** as being the original author,  
(2) you re-share your presentation under the same terms.

You can download the sources of this presentation here:  
<https://github.com/severin-lemaignan/hri-beamer-theme>

# WITH PLYMOUTH UNIVERSITY

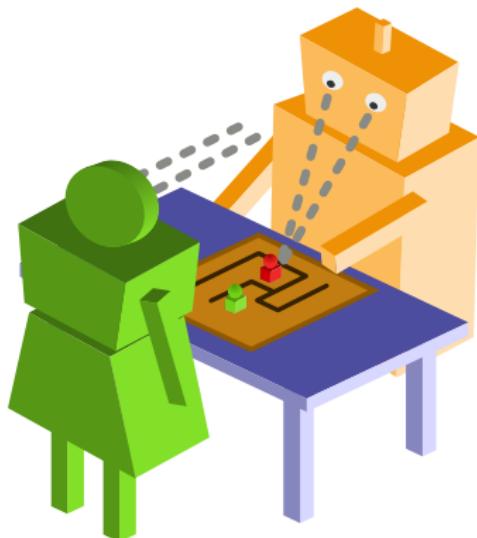


## Of Cognition and Social Robots towards a theory of artificial social cognition

X University – 18 July 2017

Séverin Lemaignan

Centre for Neural Systems and Robotics  
Plymouth University



# INTRODUCTION

# THEME OPTIONS

---

Option	Effect
basicfont	Use default Latex fonts (required to compile with pdflatex)
noflama	Use Arial instead of Flama
noserifmath	Math formula typeset in sans-serif
nosectionpages	No inter-section pages

---

# COLORS 1/2

**hriRed**

**hriRedDark**

**hriWarmGreyDark**

**hriWarmGreyLight**

**hriRed**

**hriRedDark**

**hriWarmGreyDark**

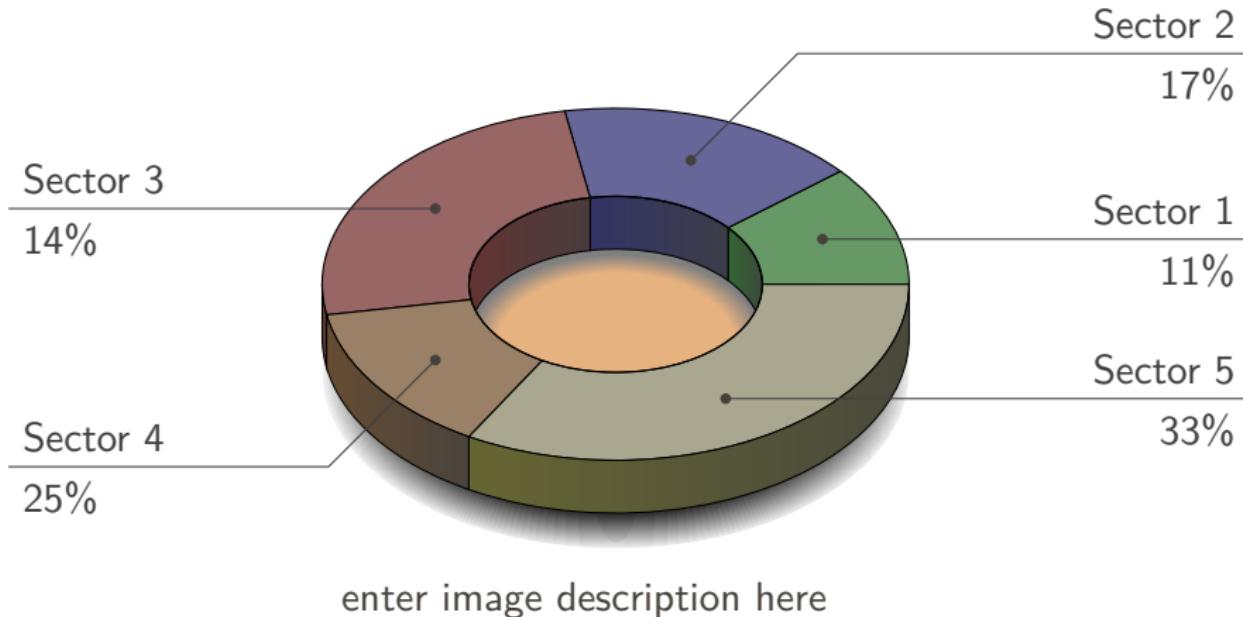
**hriWarmGreyLight**

# COLORS 2/2

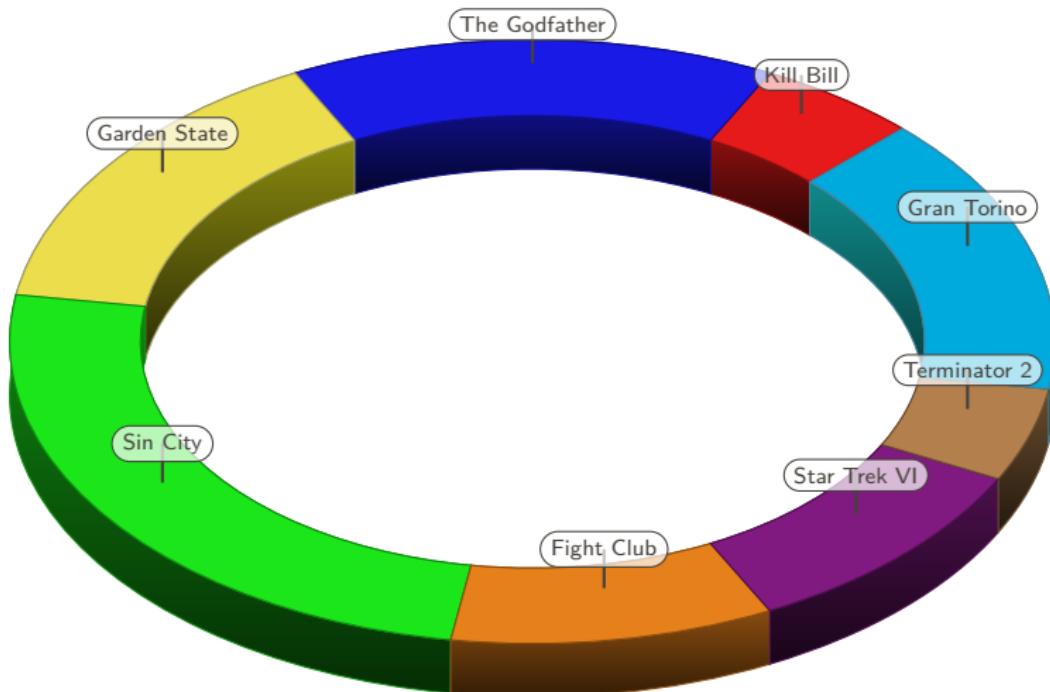
hriSec1  
hriSec1Dark  
hriSec1Comp  
hriSec1CompDark  
hriSec2  
hriSec2Dark  
hriSec2Comp  
hriSec2CompDark  
hriSec3  
hriSec3Dark  
hriSec3Comp  
hriSec3CompDark

hriSec1
hriSec1Dark
hriSec1Comp
hriSec1CompDark
hriSec2
hriSec2Dark
hriSec2Comp
hriSec2CompDark
hriSec3
hriSec3Dark
hriSec3Comp
hriSec3CompDark

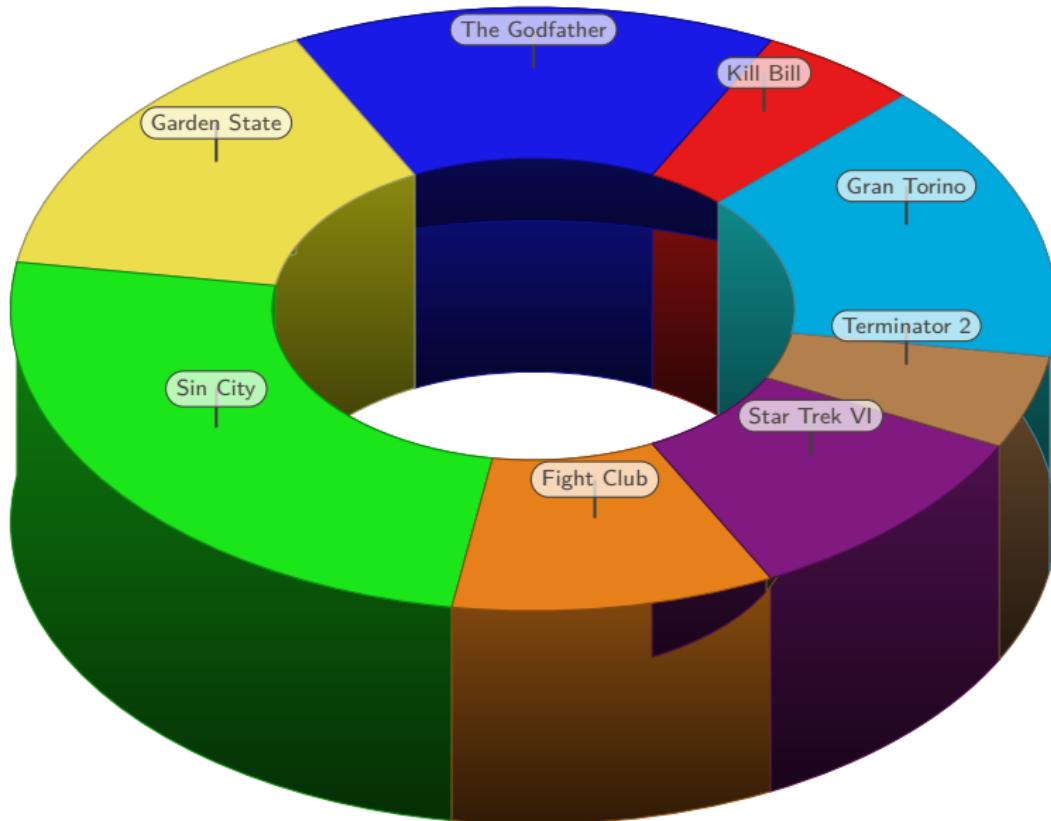
# 3D PIE CHART WITH TIKZ



## 3D PIE CHART WITH TIKZ



## 3D PIE CHART WITH TIKZ



# CODE

A slide with some code. C++, Python, sh and XML are pre-configured.

---

```
def print_hello():
    print("Hello World!")

if __name__ == "__main__":
    print_hello()
```

---

# BLOCKS

## Alert block

Aaaaaagh!

## Example block

Ooooohh!

## Block with custom color

Oulala!

# CONTENT EXAMPLES

# PICTURE WITH CREDIT LINE



Copyright EPFL 2014

# FULLSCREEN PICTURE/GRAPHIC



## Block with tile

- Item 1
- Item 2





Children playing with the Ranger robot

## TABLE

**Table:** Selection of window function and their properties

Window	First side lobe	3 dB bandwidth	Roll-off
Rectangular	13.2 dB	0.886 Hz/bin	6 dB/oct
Triangular	26.4 dB	1.276 Hz/bin	12 dB/oct
Hann	31.0 dB	1.442 Hz/bin	18 dB/oct
Hamming	41.0 dB	1.300 Hz/bin	6 dB/oct

# MATHS

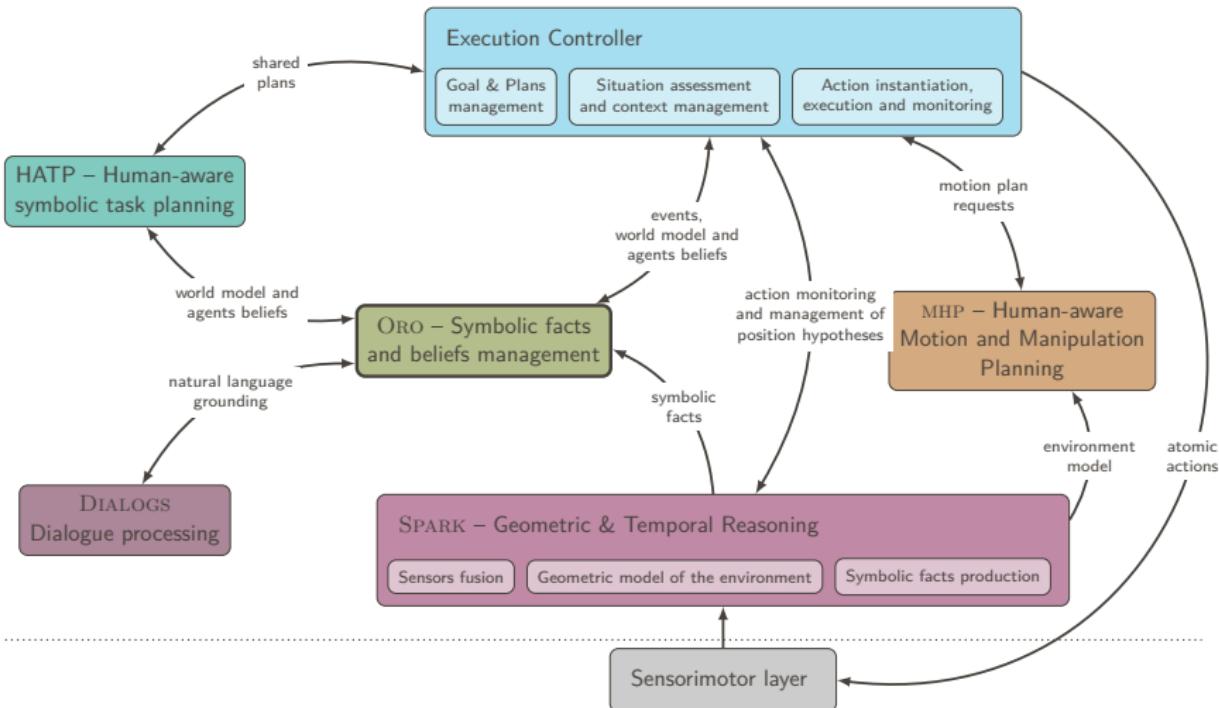
## Fourier Integral

$$F(j\omega) = \int_{-\infty}^{\infty} f(t) \cdot e^{-j\omega t} dt$$

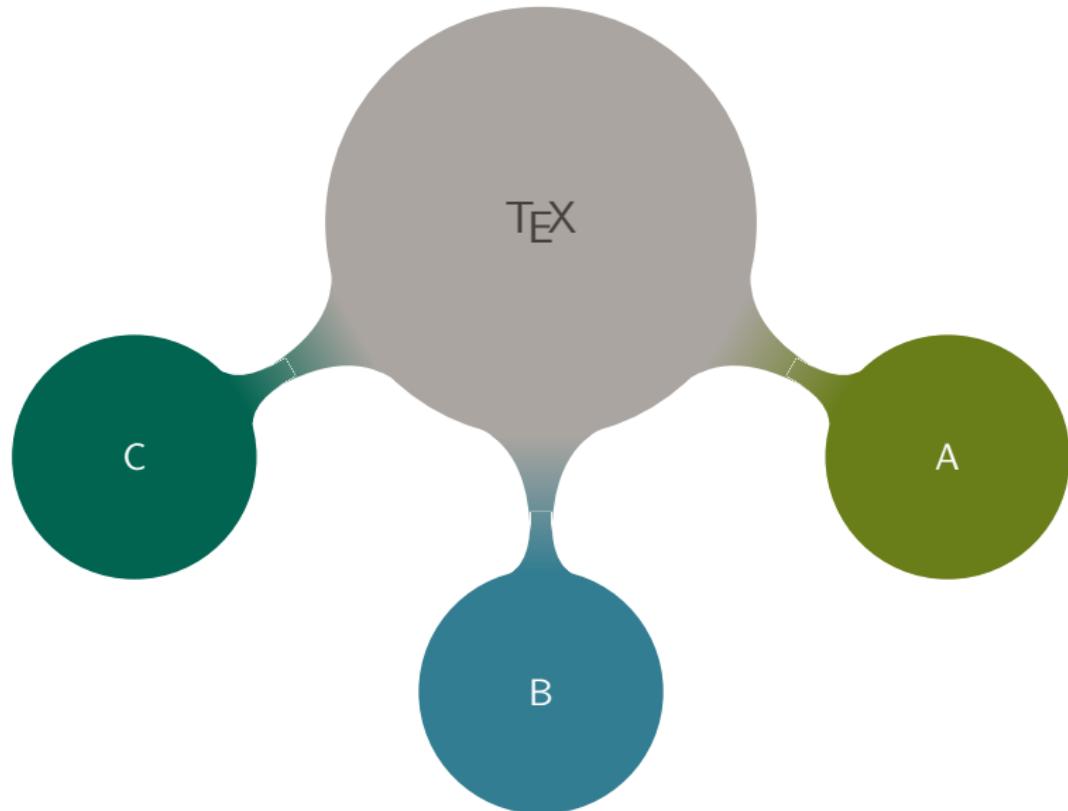
## Factorial

$$n! = 1 \cdot 2 \cdot 3 \cdot \dots \cdot n = \prod_{k=1}^n k$$

## TIKZ FIGURE



# MINDMAP WITH TIKZ



# LITTERATURE REFERENCE

You can add a reference to a paper in the page footer.

# FOOTNOTES

Lore ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lore ipsum dolor sit amet. Lore<sup>1</sup> ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lore ipsum dolor sit amet.

---

<sup>1</sup>Lore ipsum dolor sit amet

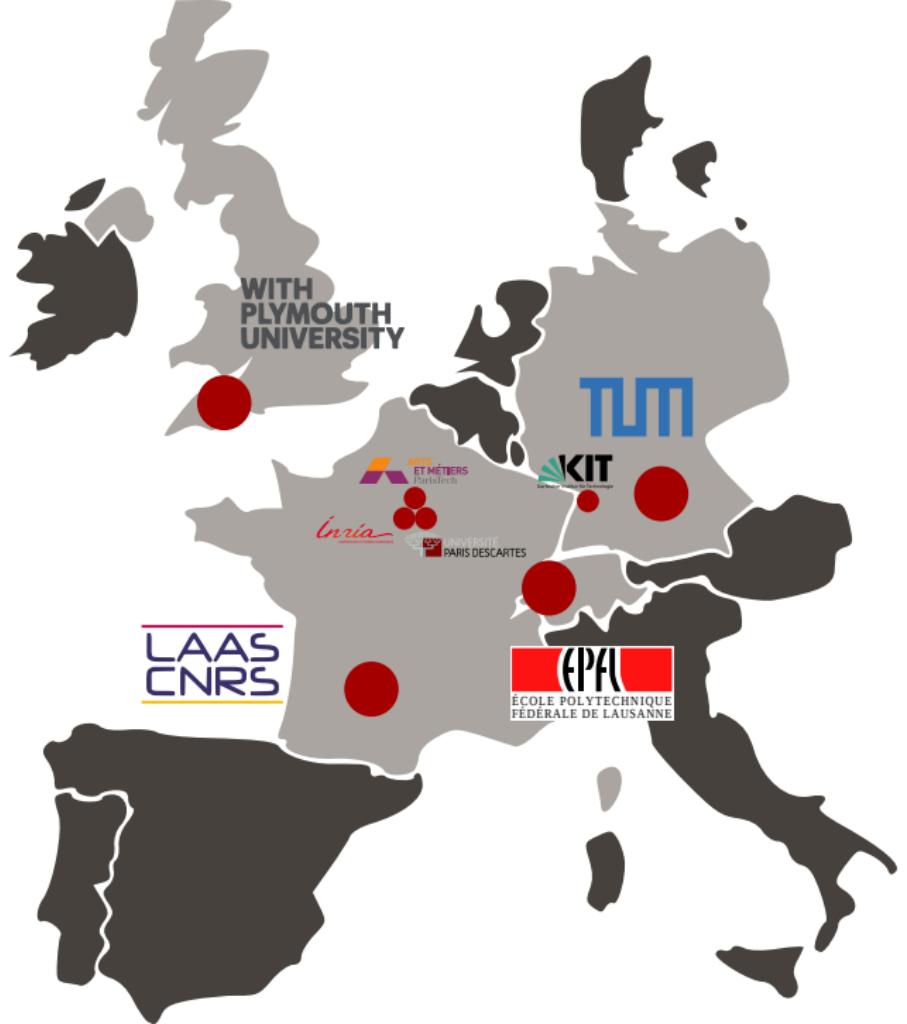
# TWO COLUMNS

Lore ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et

ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lore ipsum dolor sit amet.

- item
- item

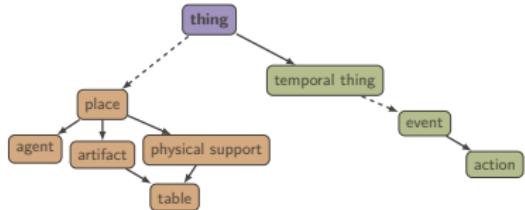
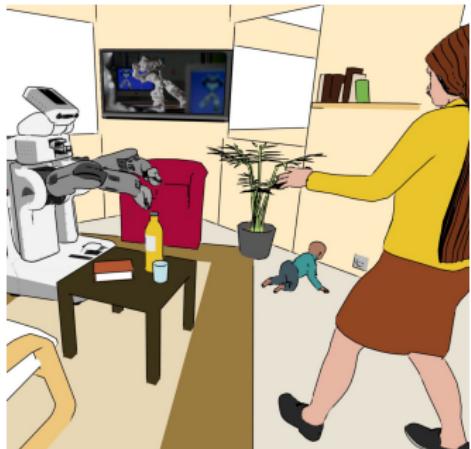
# SYMBOLIC SOCIAL COGNITION



“Cognition is a group of mental processes that includes **attention**, **memory**, producing and understanding **language**, **learning**, **reasoning**, **problem solving**, and **decision making**.”

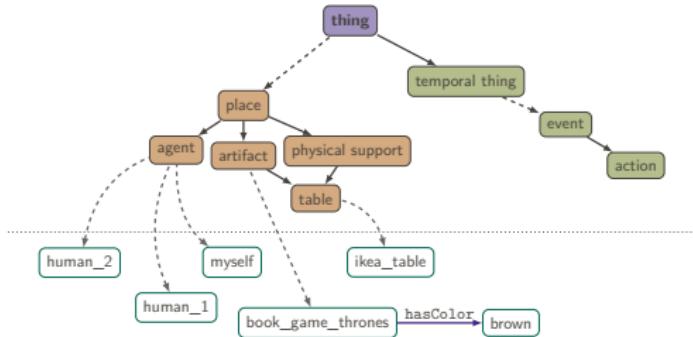
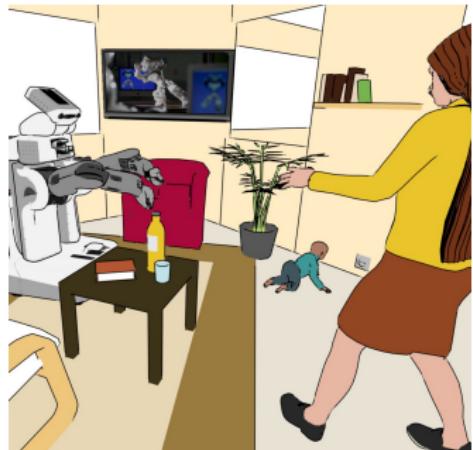


# ONLINE INSTANTIATION



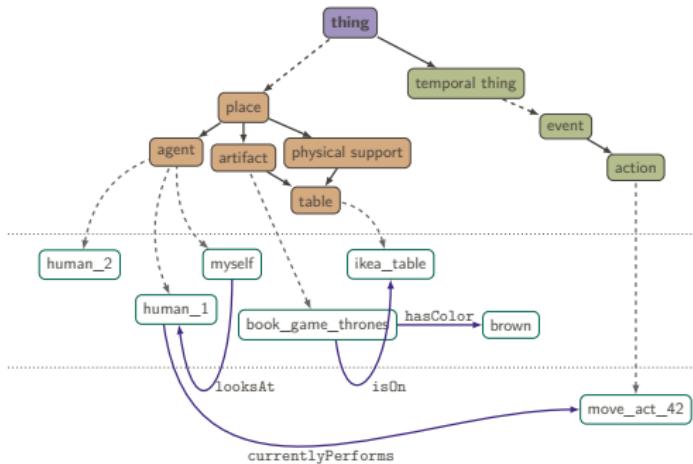
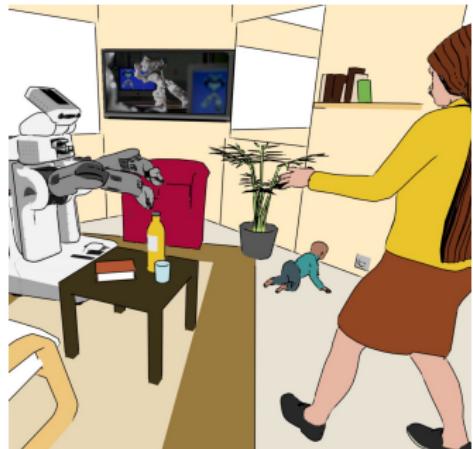


# ONLINE INSTANTIATION



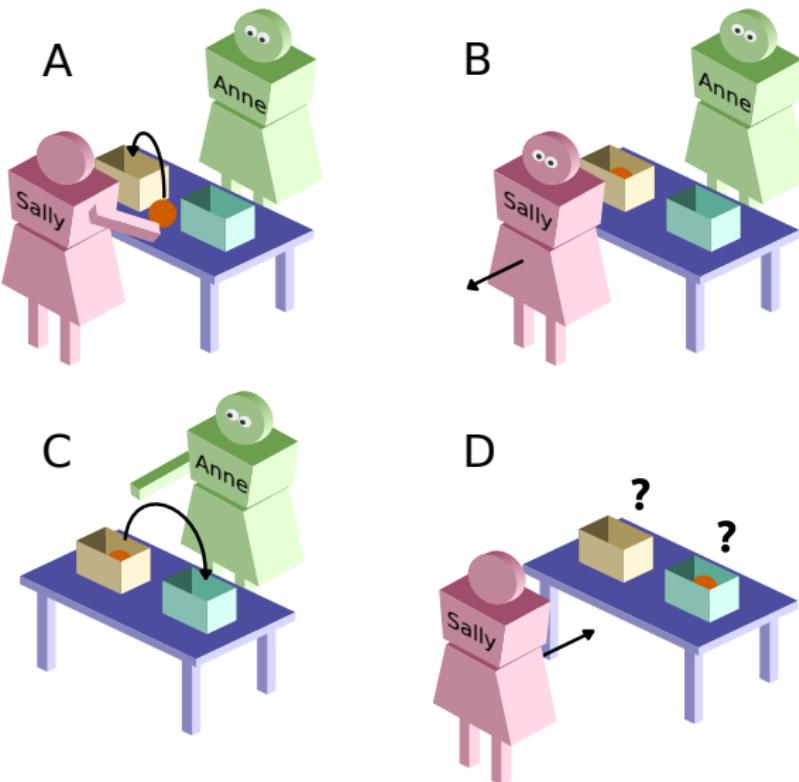


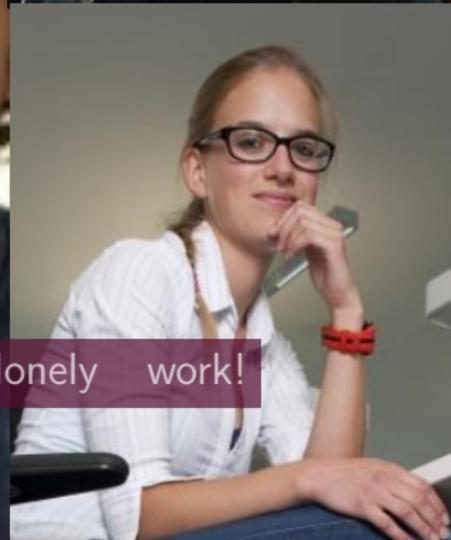
# ONLINE INSTANTIATION



# ONE STEP FURTHER: THEORY OF MIND

# THE FALSE-BELIEF EXPERIMENT





Not a lonely work!



Thanks! :-)

Séverin Lemaignan

<https://academia.skadge.org/> [Twitter icon @skadge] [GitHub icon @severin-lemaignan]

# BIBLIOGRAPHY

-  Alan V. Oppenheim  
»Discrete-Time Signal Processing«  
Prentice Hall Press, 2009
-  European Broadcasting Union  
»Specification of the Broadcast Wave Format (BWF)«  
2011



This presentation is released under the terms of the  
**Creative Commons Attribution-Share Alike** license.

You are free to reuse it and modify it as much as you want as long as  
(1) you mention **Séverin Lemaignan** as being the original author,  
(2) you re-share your presentation under the same terms.

You can download the sources of this presentation here:  
<https://github.com/severin-lemaignan/hri-beamer-theme>