

UNIVERSITÉ  
CÔTE D'AZUR

univ-cotedazur.fr Observatoire  
de la Côte d'Azur

Inria

Centre  
Hospitalier  
Universitaire  
de Nice

life  
**SDS**  
sustainable  
design school

CNRS NICE

cirm

Université  
Nice  
Sophia Antipolis

cnrs

**skema**  
BUSINESS SCHOOL

EDHEC  
BUSINESS SCHOOL

GROUPE  
**ESRA**

villa arson nice

Ecole Supérieure  
de Danse  
de Cannes-Mougins  
MILLENAIRE

Les Centres de Référence UCA  
pour le partenariat et l'innovation  
ROBOTPACA 2018  
26 juin 2018

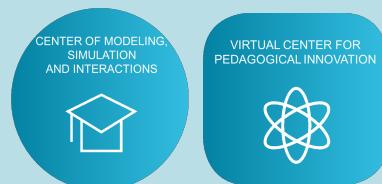
UNIVERSITÉ **CÔTE D'AZUR**

# UCA Overview

## *Scientific & Education Challenges*



## *Innovation*



## *Societal Challenges*

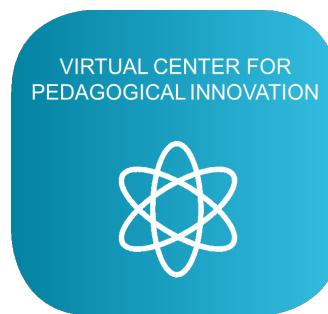
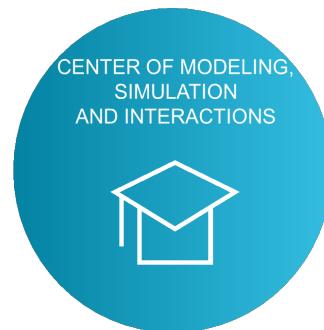


## *Academias*

## *Innovation Centers*

## *Centers of Reference*

# Academies of excellence & Innovation Centers





**Health, well-being, aging**

**Smart City, prevention of risks**

**Digital Challenges**

HEALTH,  
WELL-BEING  
AND AGING



SMART TERRITORY  
RISK PREVENTION  
AND MANAGEMENT

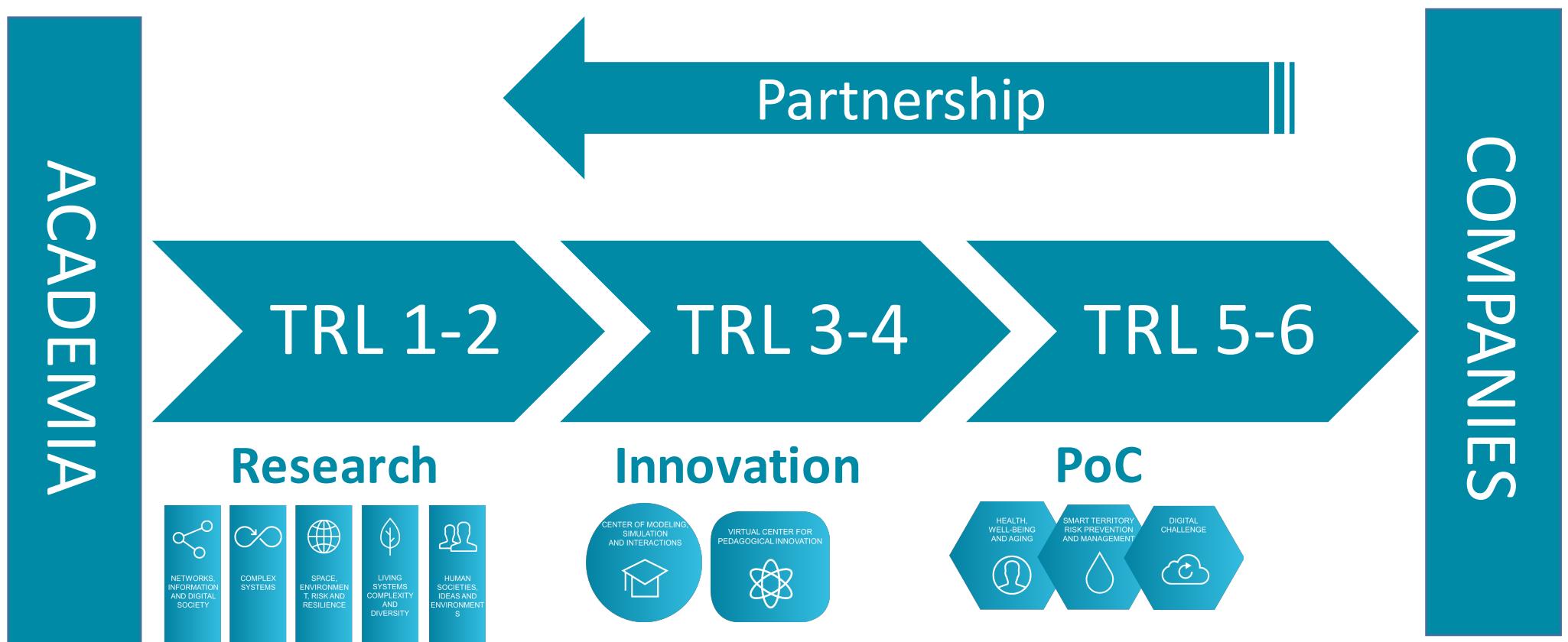


DIGITAL  
CHALLENGE

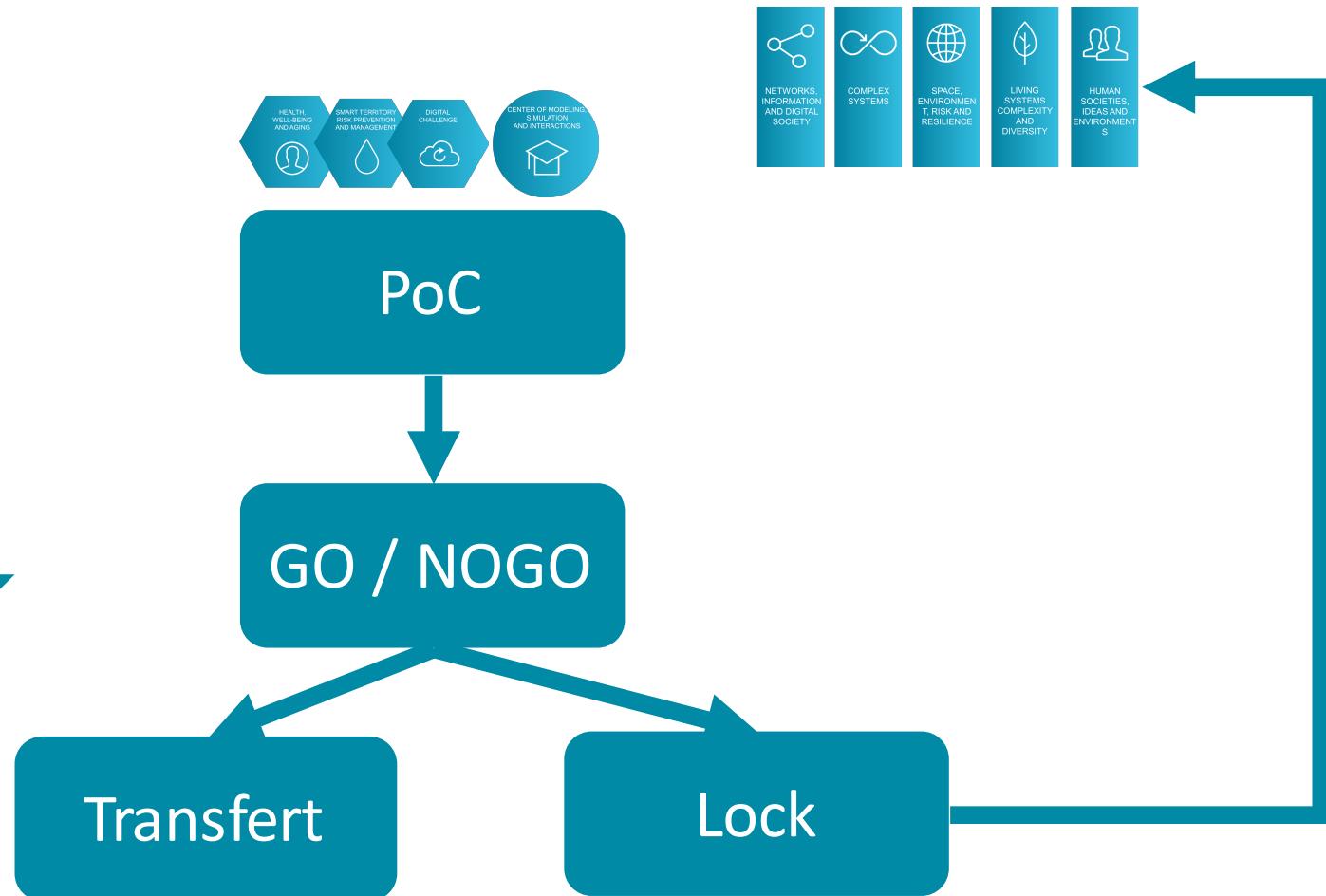


## 3 Reference Centers

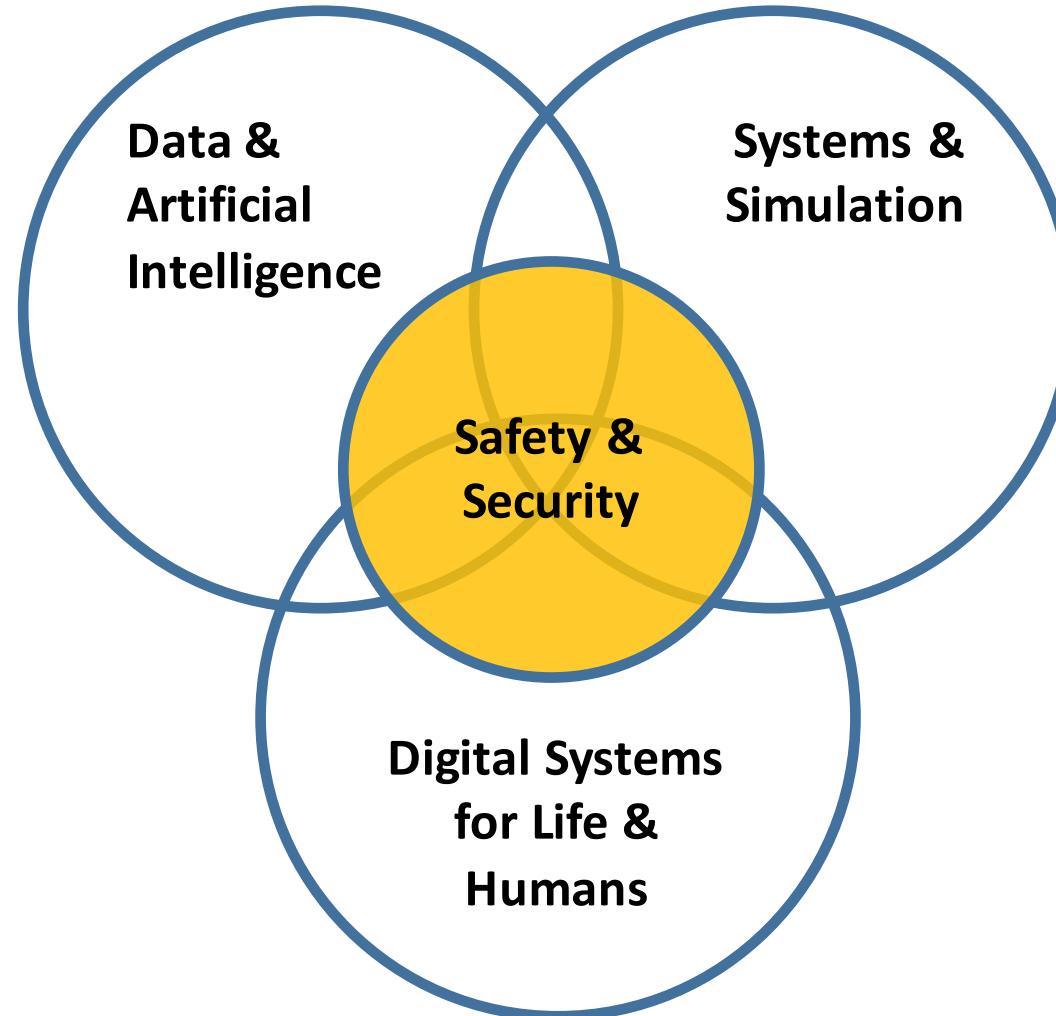
# Technology Maturing & Transfer



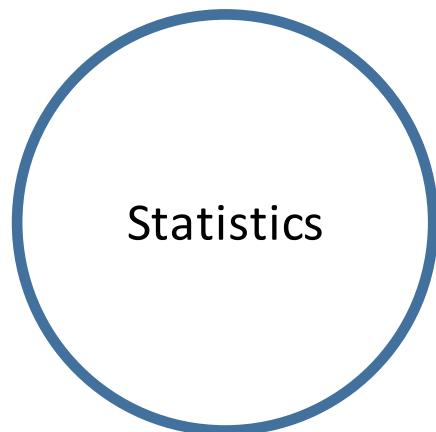
# Proof-of-Concept (PoC)



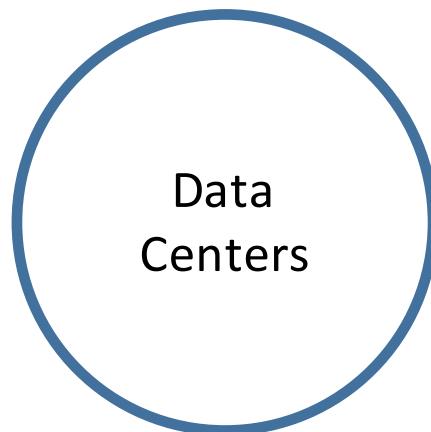
# Strategic Domains



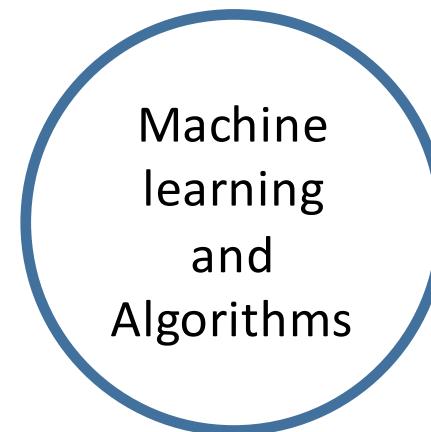
# Data & Artificial Intelligence



- Medical image analysis
- Energy consumption control & monitoring
- Tourism customer experience

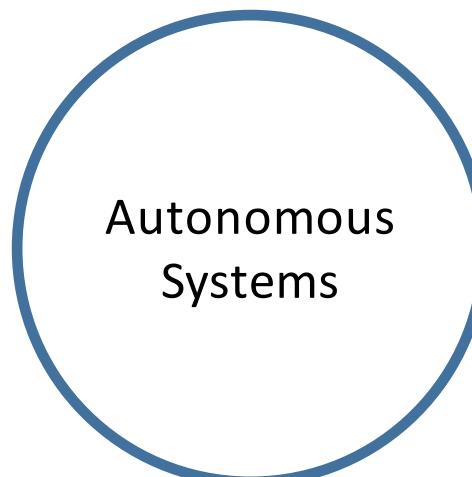


- Mutualized Infrastructures
- Performant storage
- Performant networks

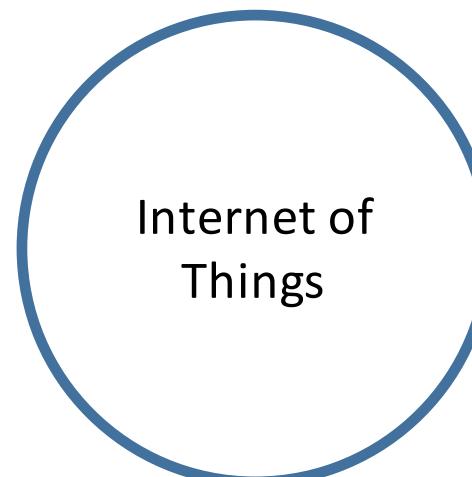


- Predictive maintenance
- Prevention of risks
- Urban infrastructures management

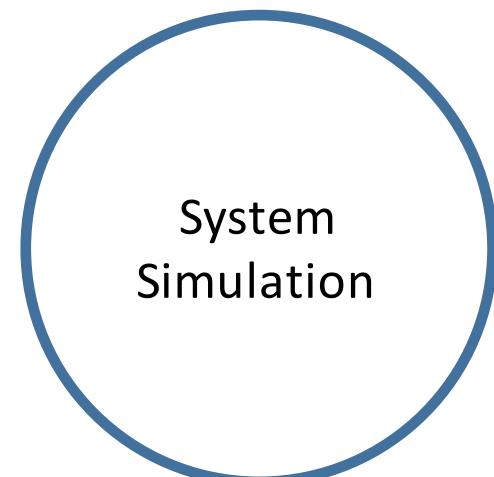
# Systems & Simulation



- Control command for autonomous vehicles and Robotics
- Digital perception

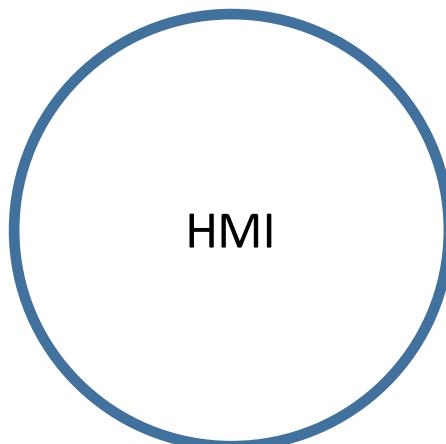


- Intelligent sensors
- Low-power and performant hardware
- Performant communication protocols
- Embedded software

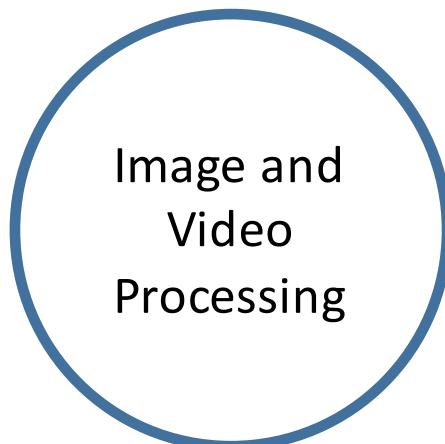


- HPC
- Multi-physics modeling
- Rapid prototyping
- Digital twin
- Real-time systems

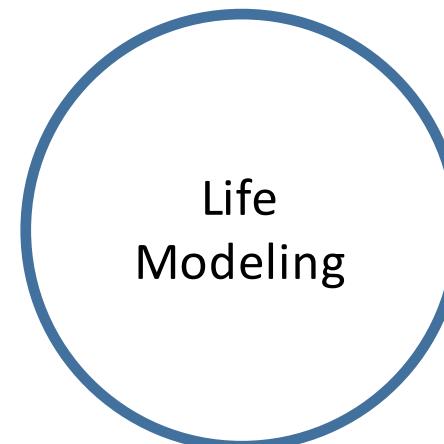
# Systems for Life & Humans



- Augmented reality
- 3D objects insertion
- Adaptative HMI
- *Affordance*



- Medical images
- 3D scenes recognition



- Bio modeling
- Patient modeling
- Graphical modeling of 3D environment

# Safety & Security

Safety

- Verifiable systems and software
- Domain specific programming languages
- Certification

Security

- Secured platforms
- Cryptography
- Threats detection
- Secured communications
- Block chain



## Qu'a-t-on à offrir pour la structuration ?

- Acteurs académiques en Robotique, sciences du numérique, SHS, Sciences économiques
- Les CdR, guichets efficaces simplifiant le montage de partenariat en concertation avec les services valorisation et transfert des membres et partenaires d'UCA (SATT, Inria STIP, UNS Valorisation, etc.)
- Plateformes technologiques dotées d'ingénieurs spécialisés et experts pour la réussite de projets d'innovation en collaboration avec les Pôles de Compétitivité (SCS, SAFE, Mer)



# Qu'attend-on d'une structuration ?

- Connaissance et rencontres des acteurs de la Robotique
- S'associer aux organisations œuvrant dans le rapprochement du monde académique avec le monde économique pour :
  - Identifier les verrous technologiques et scientifiques des entreprises / start-up dans leur démarches d'innovation
  - Monter les plateformes technologiques collaboratives et les formations répondant aux besoins des entreprises
  - Monter les partenariats pour la valorisation, le transfert technologique, la création de start-ups