UNIFYING CONTROL AND VERIFICATION OF

CYBER-PHYSICAL SYSTEMS

(UnCoVerCPS)

Name Surname, Affiliation

HORIZON 2020

MAIN OBJECTIVES

- Novel on-the-fly control and verification concepts.

- Ground-breaking methods for unifying control and verification to quickly react to changing environments.

- Seamless integration of modelling and conformance testing.

- Prototypical realisations of the novel methods in automated vehicles and human- robot collaborative manufacturing.

- Analysis of the benefits of formal methods on wind turbines and smart grids case studies.

- A new development process that reduces development time and costs for critical cyber-physical systems to strengthen European companies which design or produce cyber-physical systems.
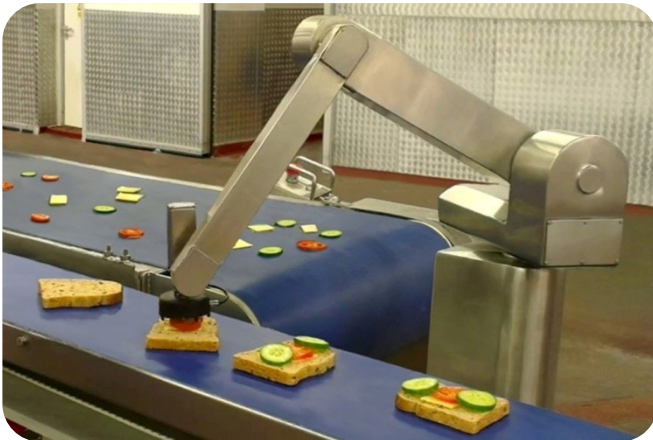
HORIZON 2020

DEMONSTRATORS

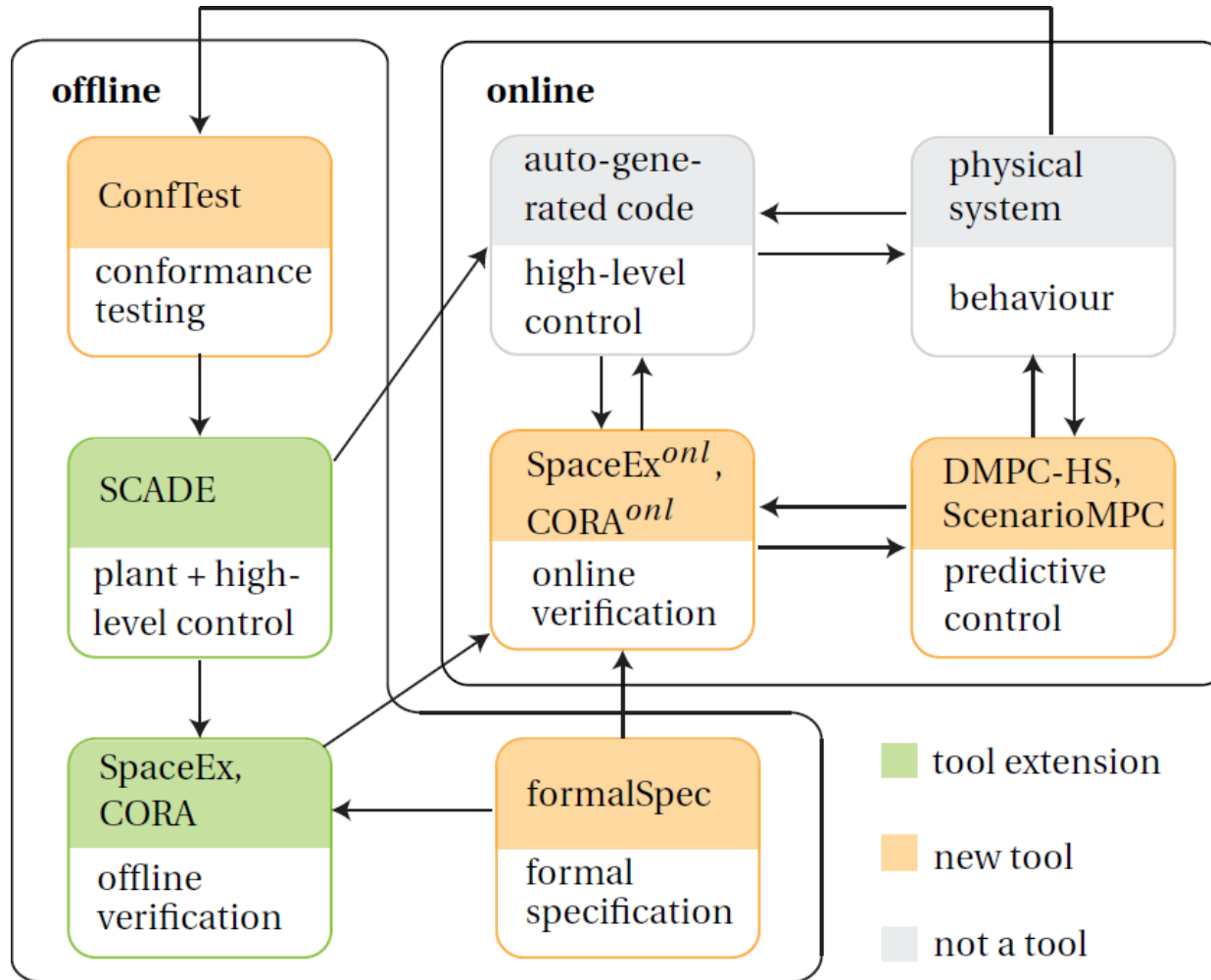Automated Vehicles

Wind Turbines

Human-Robot Collaboration

Smart Grids

TOOL CHAIN

A unique tool chain to integrate:

- modelling,
- control design,
- formal verification,
- automatic code generation.

CONSORTIUM

Technische Universität München (TUM) – *Coordinator*
Germany

Robert Bosch GmbH (Bosch)
Germany

Université Joseph Fourier Grenoble 1 (UJF)
France

Esterel Technologies (ET)
France

Universität Kassel (UKS)
Germany

Deutsches Zentrum für Luft- und Raumfahrt (DLR)
Germany

Politecnico di Milano (PoliMi)
Italy

Tecnalia (Tec)
Spain

GE Global Research Europe (GE)
Germany

R.U.Robots Limited (RUR)
United Kingdom