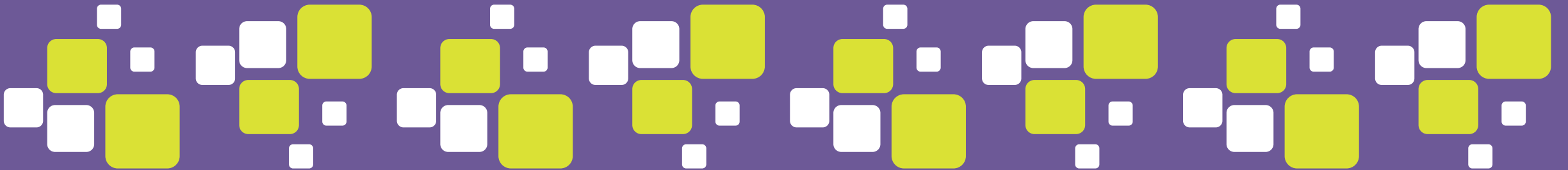




# FLUIDOS @AIOTI Days

Flexible, scaLable, secUre, and decentrallseD Operating System

F. Risso, Politecnico di Torino (Italy)



# Agenda



How long	What	Who
8	The FLUIDOS computing continuum: <b>overview</b> and concept	Fulvio Riso (POLITO)
13	<b>Sharing</b> resources and services within the continuum	Fulvio Riso (POLITO)
13	<b>Energy</b> and <b>carbon efficiency</b> : the power of the continuum	Nasir Asadov (TUB)
13	<b>Securing</b> the continuum	Luis Dias Knob (FBK)
13	FLUIDOS <b>use cases</b>	Andy Edmonds (TER)
5	<b>Collaboration</b> opportunities: 2nd open call	James Philpot (DSME)
10	<b>Q&amp;A</b>	All



# Many silos



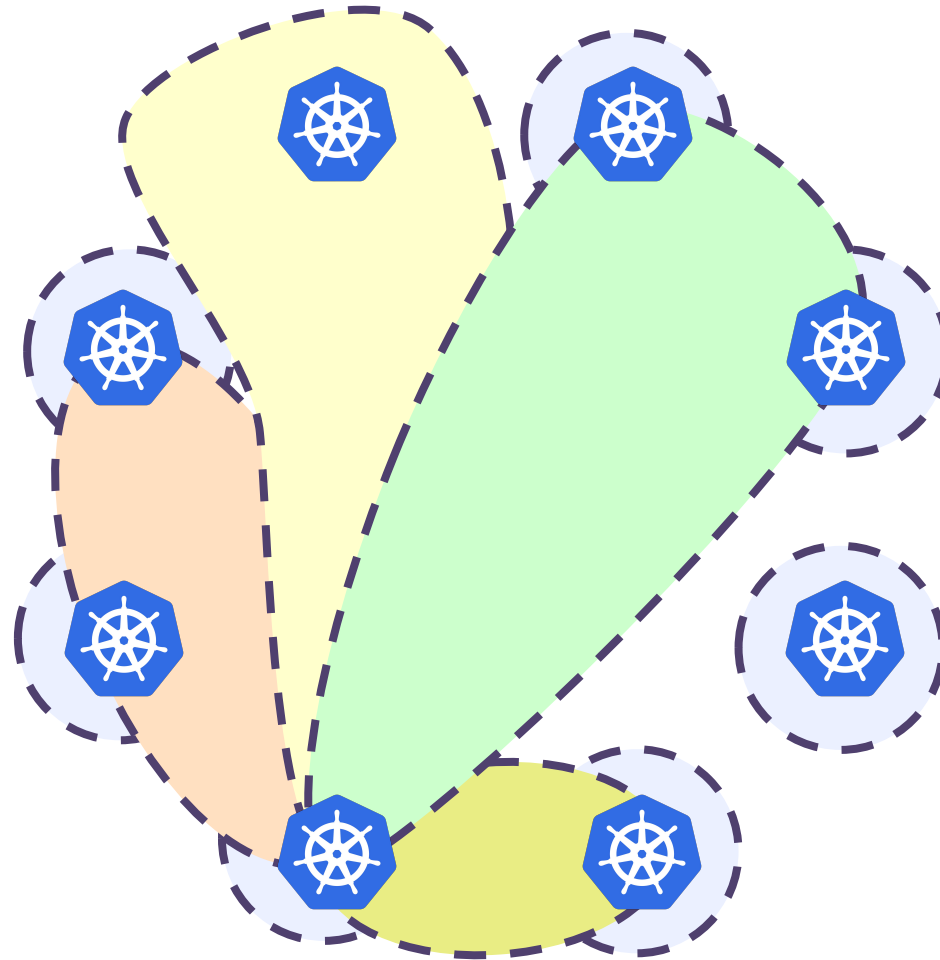
IoT/Edge



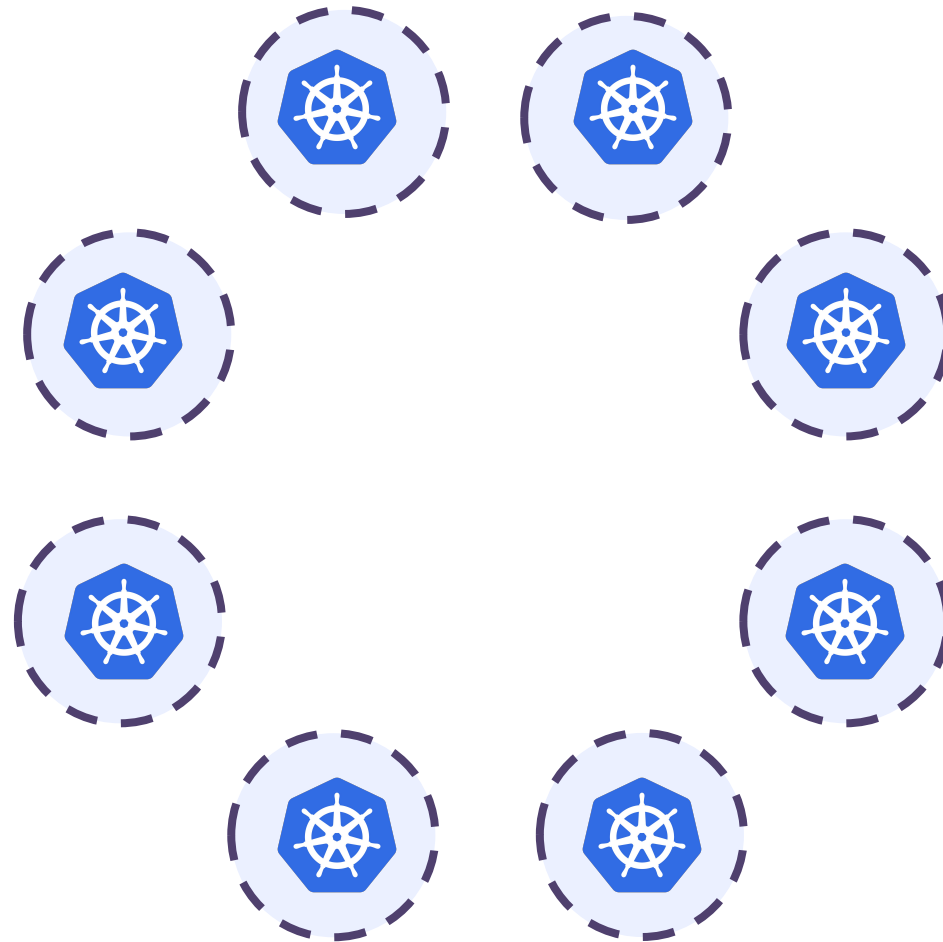
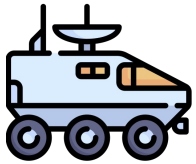
Cloud



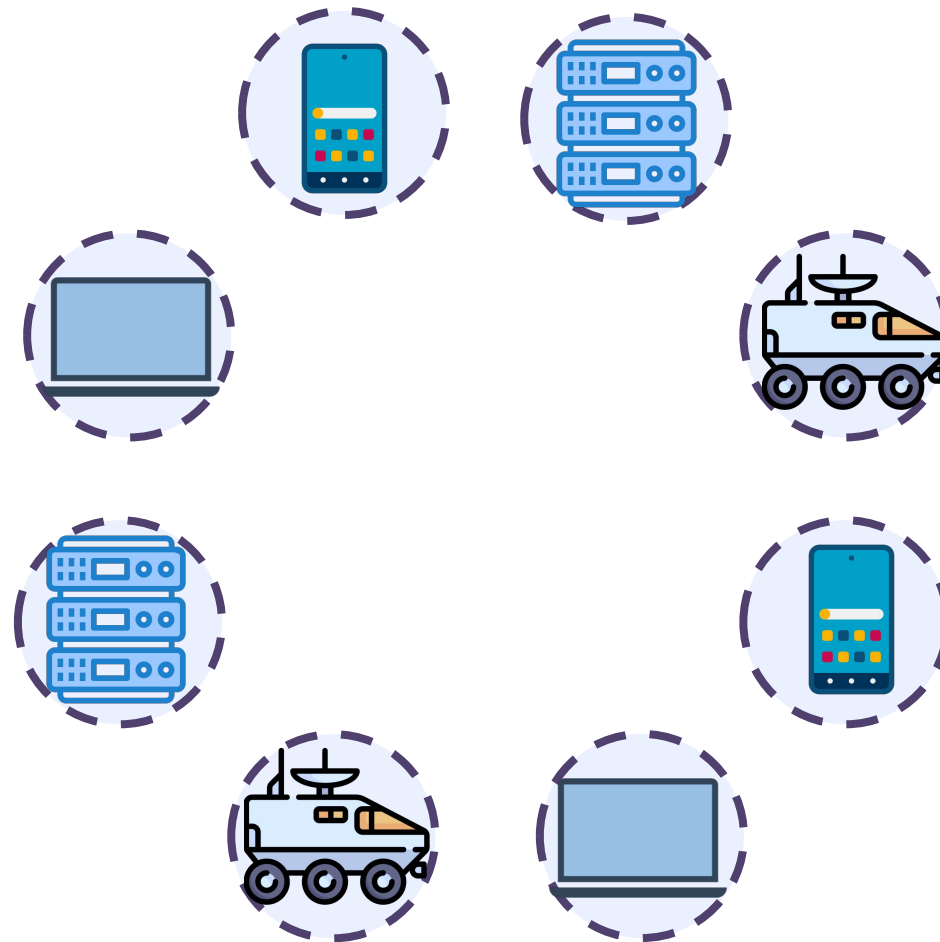
# From many silos to a seamless computing space



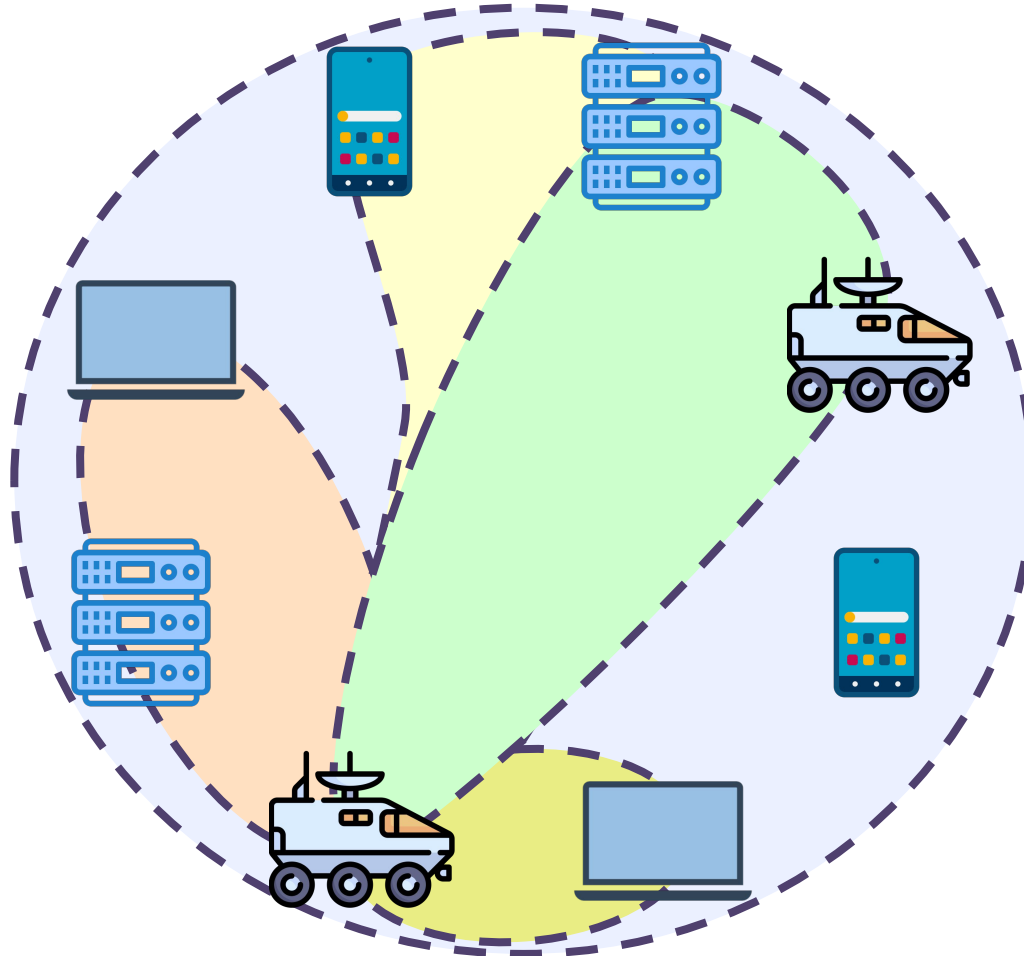
# From many silos ...



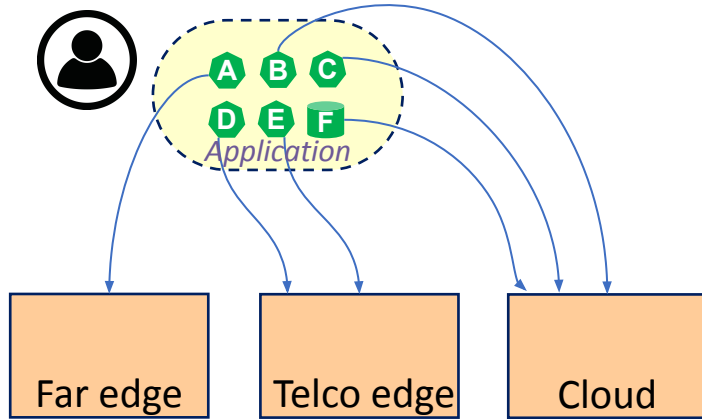
# From many silos ...



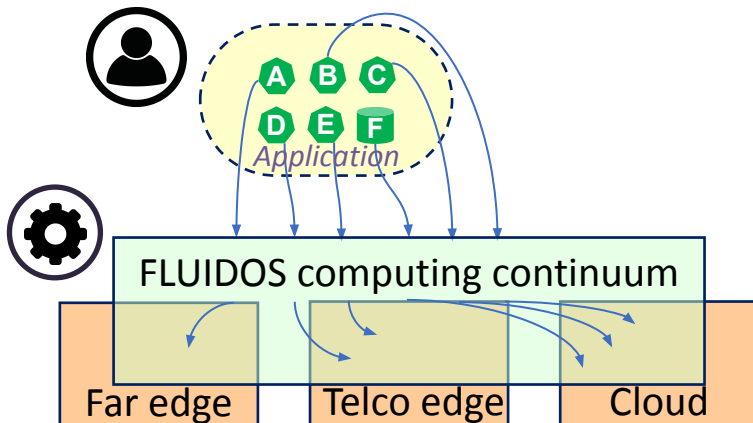
...to a dynamic, endless computing space



# FLUIDOS is all about transparency



a) Current silos-based computing continuum



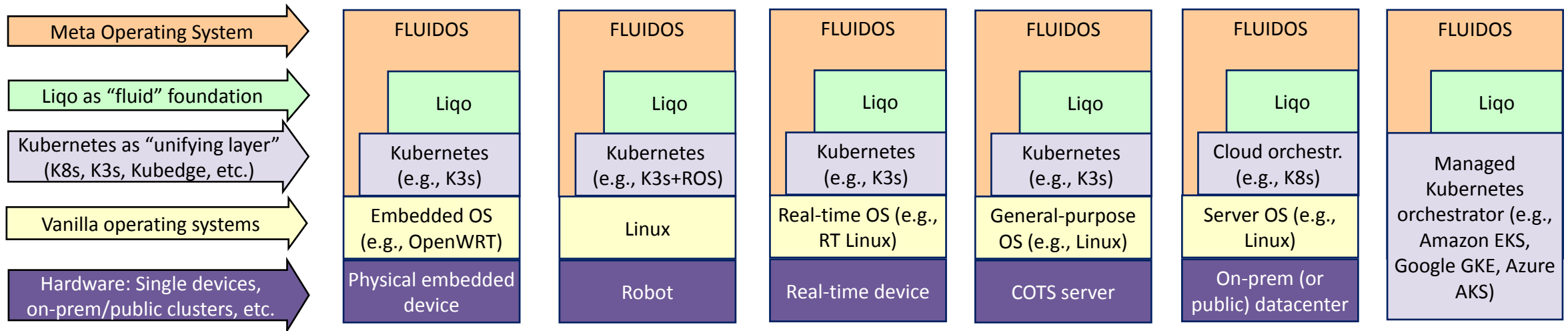
b) FLUIDOS computing continuum

The **FLUIDOS** computing **continuum** defines *multiple, dynamic, secure virtual spaces*, spanning across multiple *technological* domains and *administrative* boundaries, with **orchestration transparency**, **communication transparency**, and **resource transparency**.

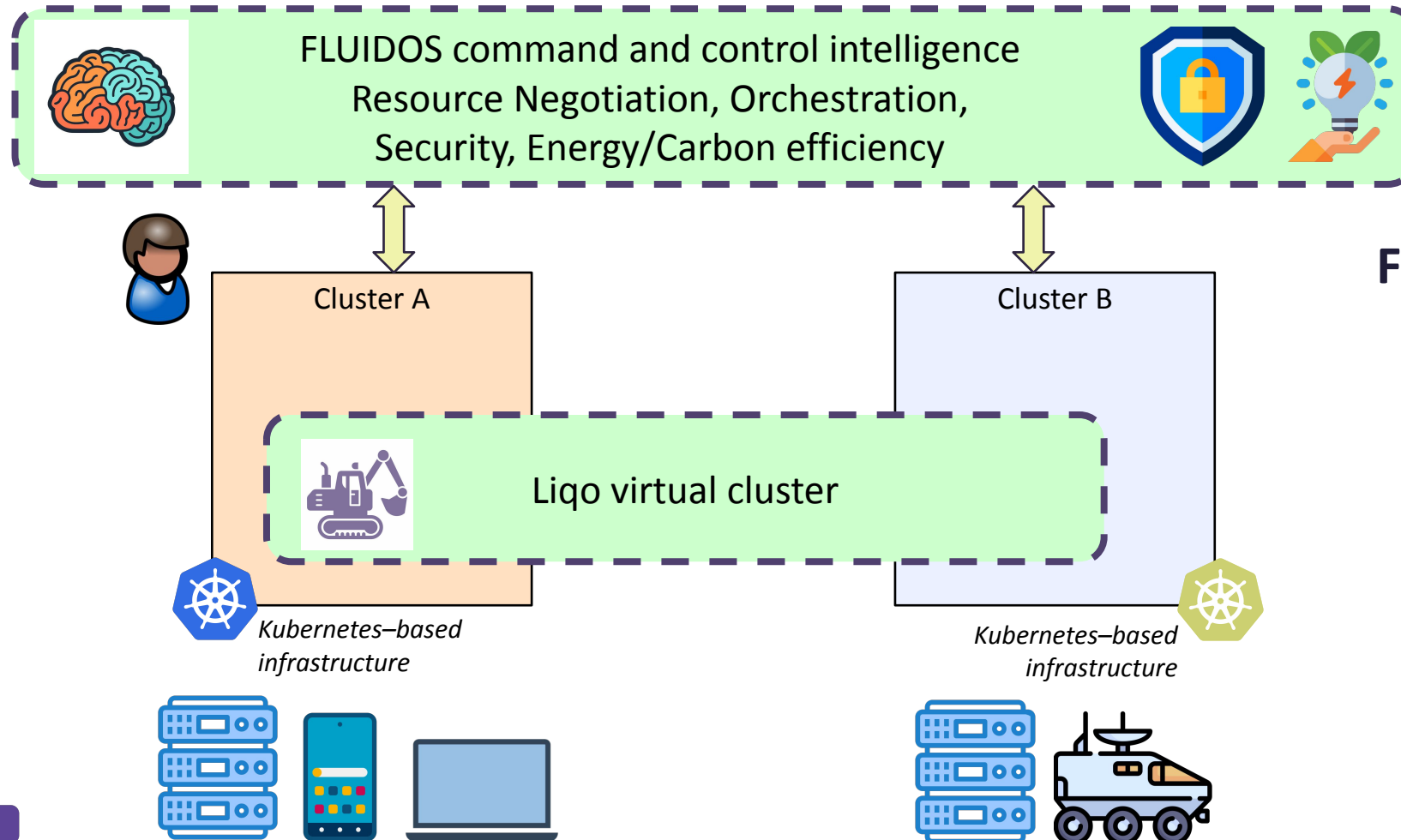




# The FLUIDOS stack



# Kubernetes, Liqo and FLUIDOS



**FLUIDOS** defines a **platform** (a.k.a. *meta operating system*) to make the computing continuum **transparent, and real.**



# FLUIDOS: Main challenges



Knowledge about available  
resources, negotiation, and  
reservation *[Fulvio]*

Orchestration

Capability to privilege green  
energy *[Nasir]*

Security *[Luis]*

Scalability

Envision a path to create real  
running code, beyond the  
expected project outcome as PoC

Reduce energy consumption and  
optimize the lifetime of the  
infrastructure

Evaluate and assess the FLUIDOS  
vision in real use cases and pilots  
*[Andy, James]*





<https://www.fluidos.eu/>



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<https://www.linkedin.com/company/fluidos/>



<https://www.youtube.com/@FLUIDOS-Project>



<https://github.com/fluidos-project>

