

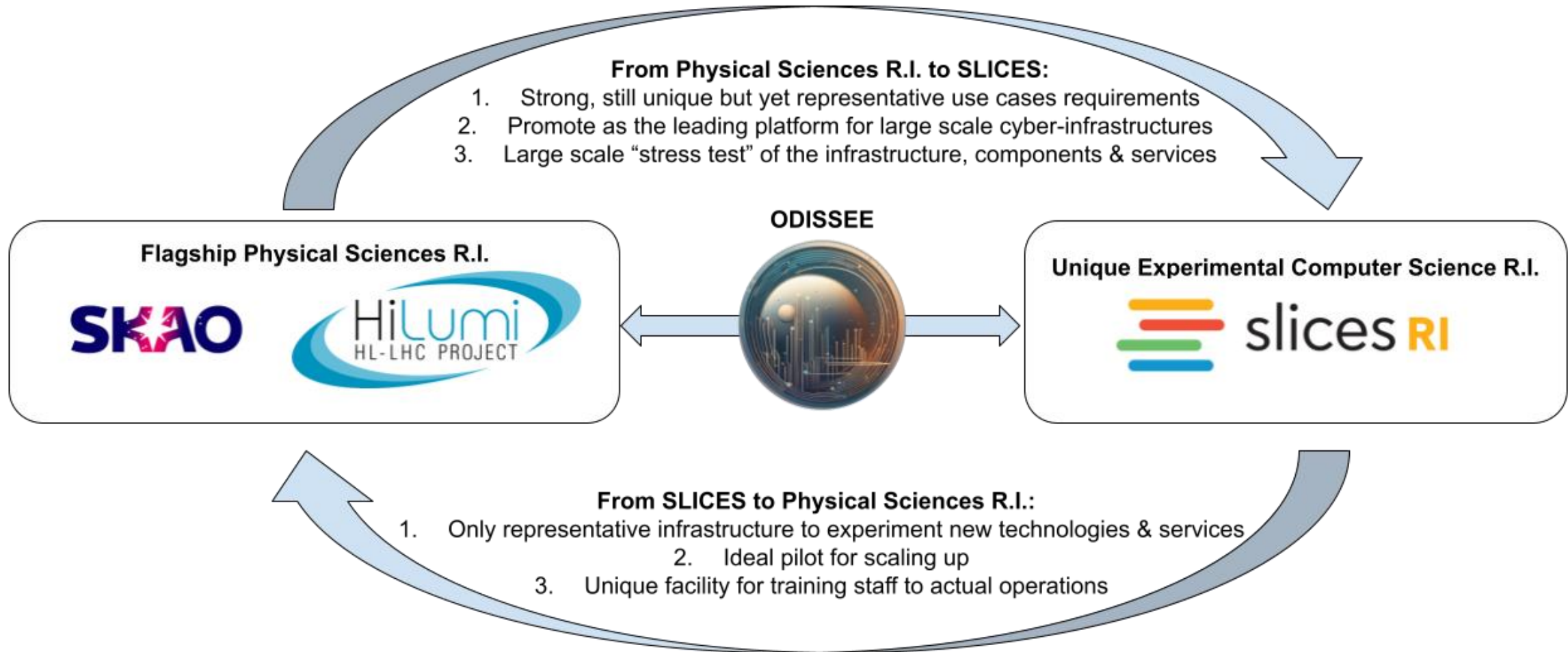
ODISSEE: Online Data Intensive Solutions for Science in the Exascale Era

Damien GRATADOUR, CNRS & Observatoire de Paris

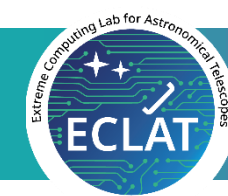


Connecting large research infrastructures

- Bidirectional links between Physical sciences and Computer Science

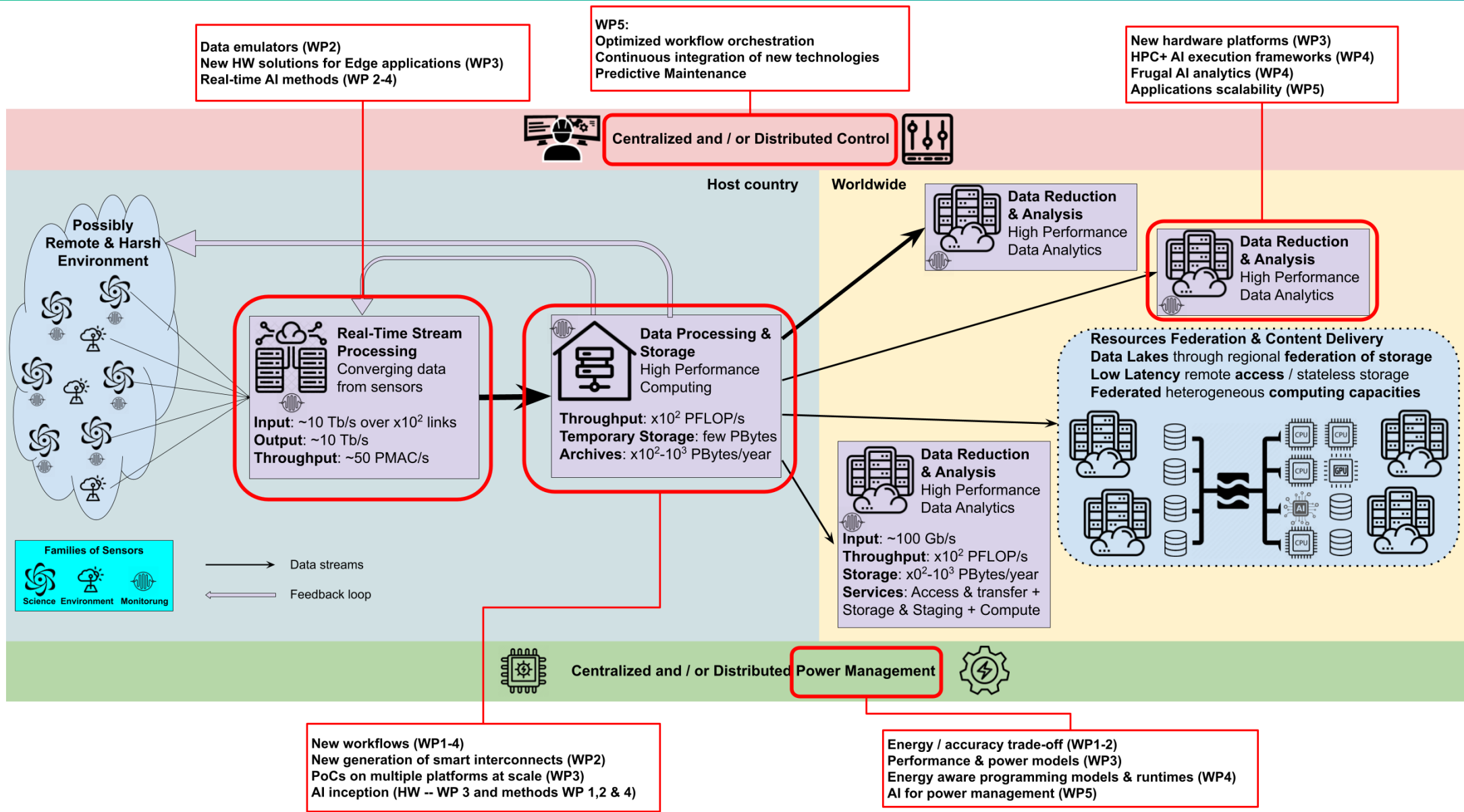


ODISSEE's consortium

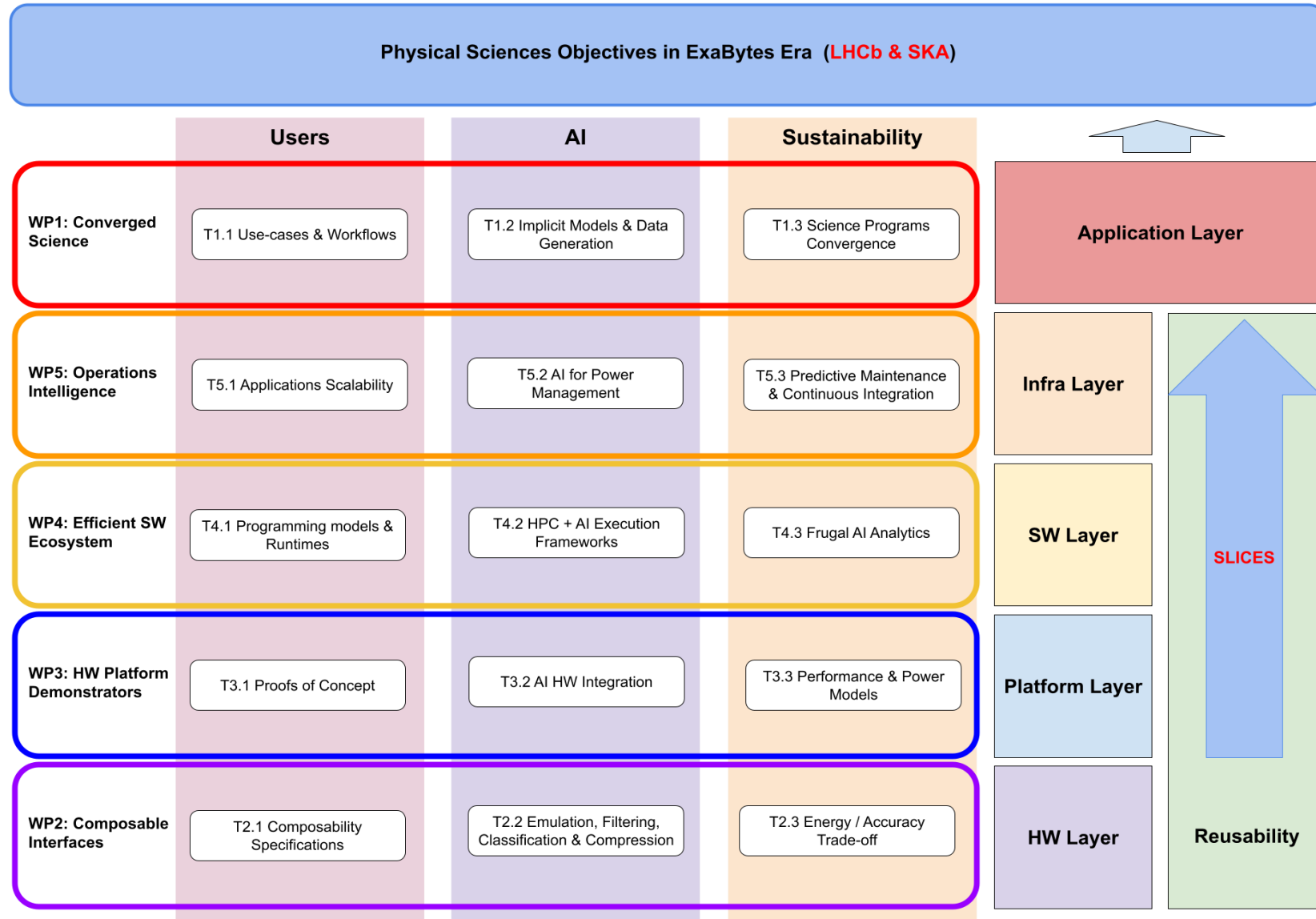


Participant #	Short name	Participant organisation name	Type	Country
1 (<u>Coord.</u>)	OP	<u>Observatoire de Paris</u>	Academia	FR
2	CNRS	Centre National de la <u>Recherche Scientifique</u>	Academia	FR
3	CERN	Organisation <u>Europeene</u> pour la <u>Recherche Nucleaire</u>	Academia	CH
4	SKAO	The Square Kilometre Array Observatory	RI	UK
5	ASTRON	ASTRON the Netherlands Institute for Radio Astronomy	Academia	NL
6	INRIA	<u>Institut Nat. de Recherche en Informatique & Automatique</u>	Academia	FR
7	BSC	Barcelona Supercomputing Center	Academia	ES
8	<u>Simula</u>	<u>Simula</u> Research Laboratory AS	Academia	NO
9	SURF	SURF BV	Academia	NL
10	GENCI	GENCI	Academia	FR
11	EAS	Energy Aware Solutions S.L.	Industry	ES
12	<u>SiPearl</u>	<u>SiPearl</u>	Industry	FR
13	<u>NextSilicon</u>	<u>NextSilicon</u>	Industry	DE
14	NEOVIA	NEOVIA Innovation	Industry	FR
15	EPFL	Ecole <u>Polytechnique Federale</u> de Lausanne	Associate	CH
16	CSCS	ETH Zurich (Swiss National <u>Supercomputing Centre</u>)	Associate	CH

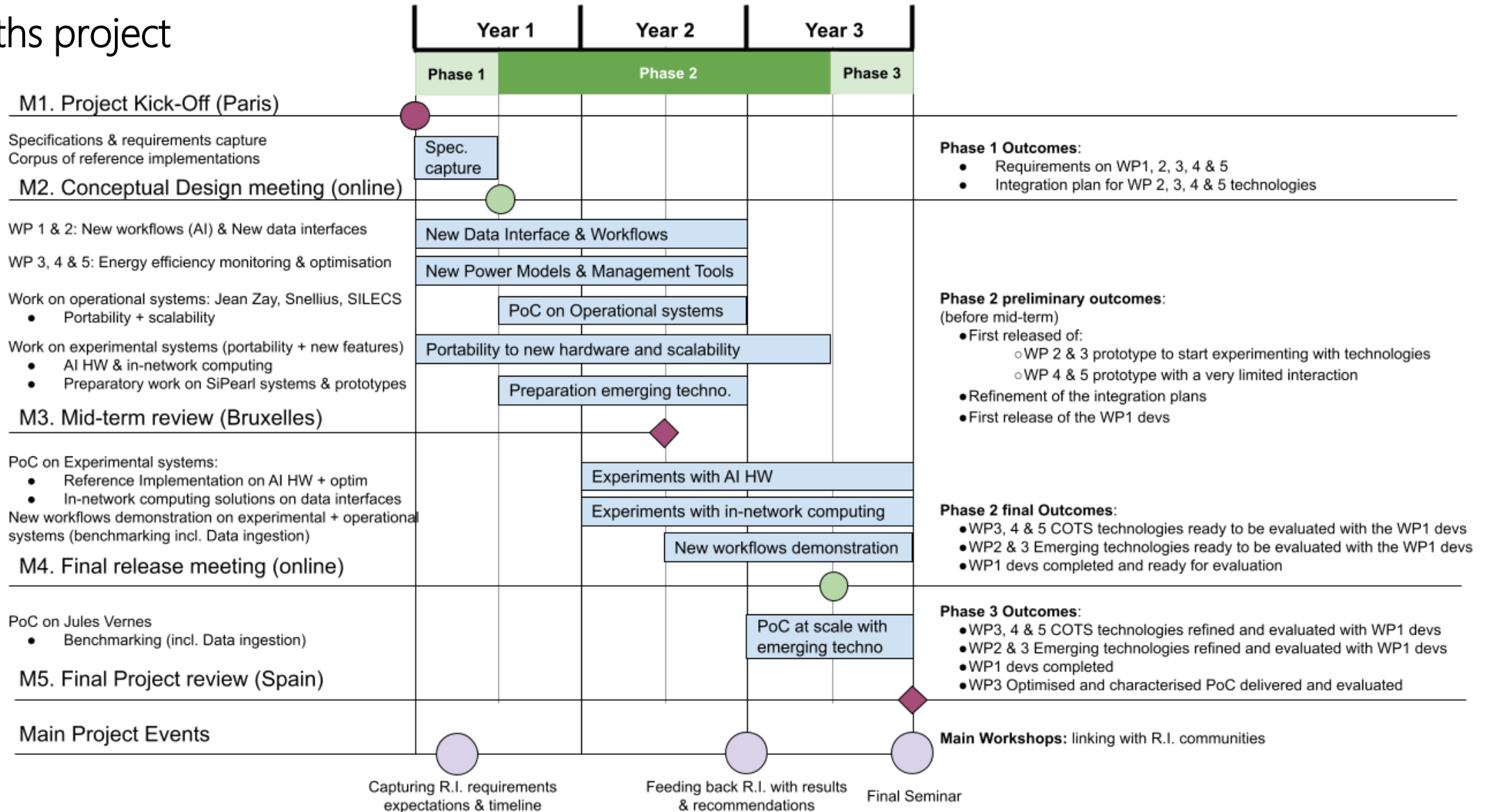
Cyber-continuum for SKA & HL-LHC



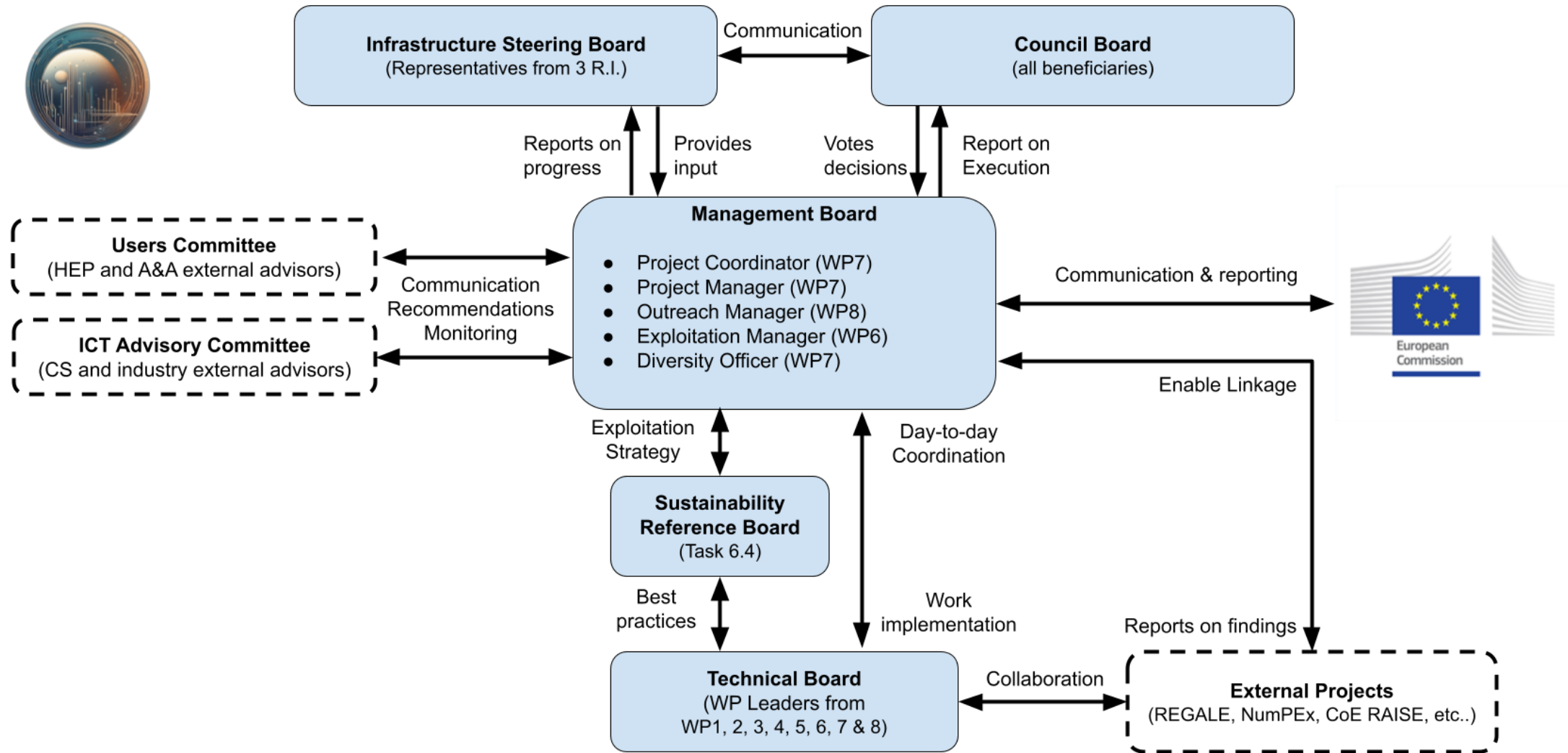
Work Packages



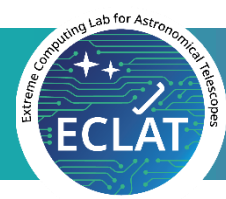
- 36 months project



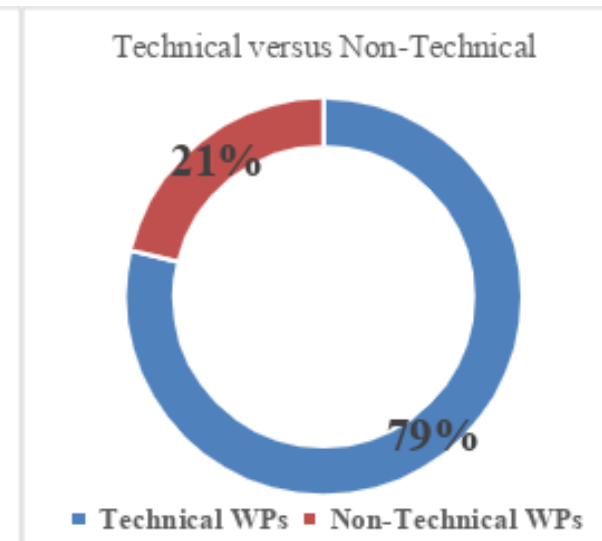
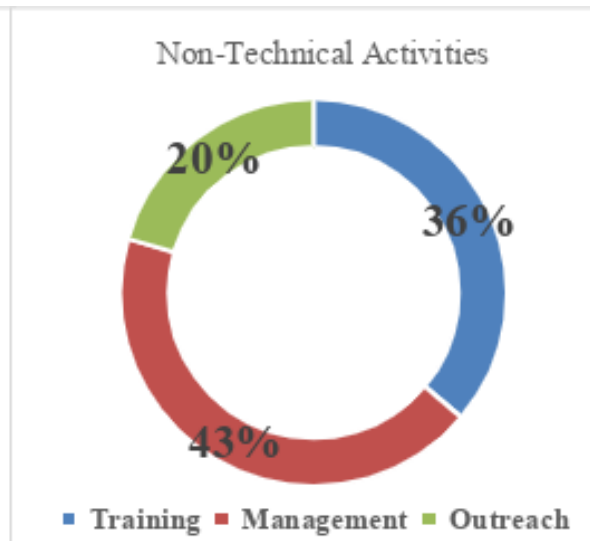
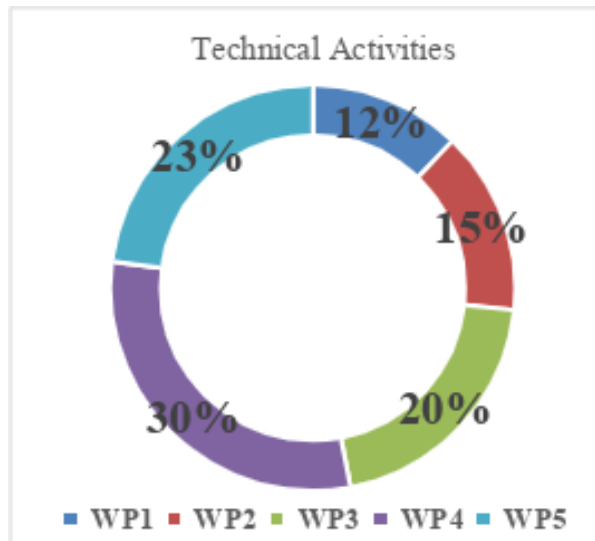
Governance structure



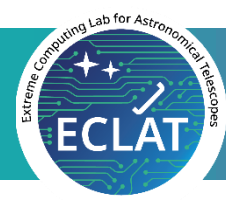
Summary of staff effort



WP	Work Package Title	Lead	Participant	# of PM	Start	End
1	Converged Science Programs	2	CNRS-IN2P3	74 + (18)	M1	M36
2	<u>Composable</u> Data Interfaces	2	CNRS-INSU	111	M1	M36
3	HW platform demonstrators	5	ASTRON	145 + (1)	M1	M36
4	Efficient SW stack	7	BSC	188 + (36)	M1	M36
5	Operations Intelligence	9	INRIA	170	M1	M36
6	Training & Exploitation	2	CNRS	72 + (2)	M1	M36
7	Project Management	1	OP	69 + (20)	M1	M36
8	Outreach	14	NEOVIA	40 + (2)	M1	M36
Total PM				869 + (79)		




Summary of staff effort




#	Name	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	Total
1	OP	-	-	-	-	-	16	36	4	56
2a	CNRS-INSU	30	30	24	12	-	2	2 + (12)	6	118
2b	CNRS-IN2P3	20	40	-	60	-	12	(8)	8	148
2c	CNRS-INS2I	-	-	-	6	12	2	1	1	22
3	CERN	-	6	15	15	-	-	-	-	36
4	SKAO	-	-	-	-	-	(1)	-	(1)	(2)
5	ASTRON	24	-	17	-	16	-	1	-	58
6	INRIA	-	12	14	9	38	16	3	1	93
7	BSC	-	-	-	40	23	-	2	1	66
8	<u>Simula</u>	-	-	18	16	3	4	-	-	41
9	SURF	-	10	18	-	18	-	-	-	46
10	GENCI	-	-	(1)	-	-	(1)	-	(1)	(3)
11	EAS	-	12	14	30	-	-	-	-	62
12	<u>SiPearl</u>	-	-	30	12	12	-	-	1	55
13	<u>NextSilicon</u>	-	13	6	4	3	-	-	-	26
14	NEOVIA	-	-	-	-	-	20	24	18	62
15	EPFL	18	-	-	-	-	-	-	-	(18)
16	CSCS	-	-	-	36	-	-	-	-	(36)

- Major investment: ~9M€ budget (inc. CH contribution)
- 16 partners (14 beneficiaries + 2 associated partners)
- Fast track: 36 months with regular interactions with communities
- Federating disciplines around key challenges for science
- Kick-Off in January 2025 !



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 [Eclat – Extreme Computing Lab for Astronomical Telescopes](#)