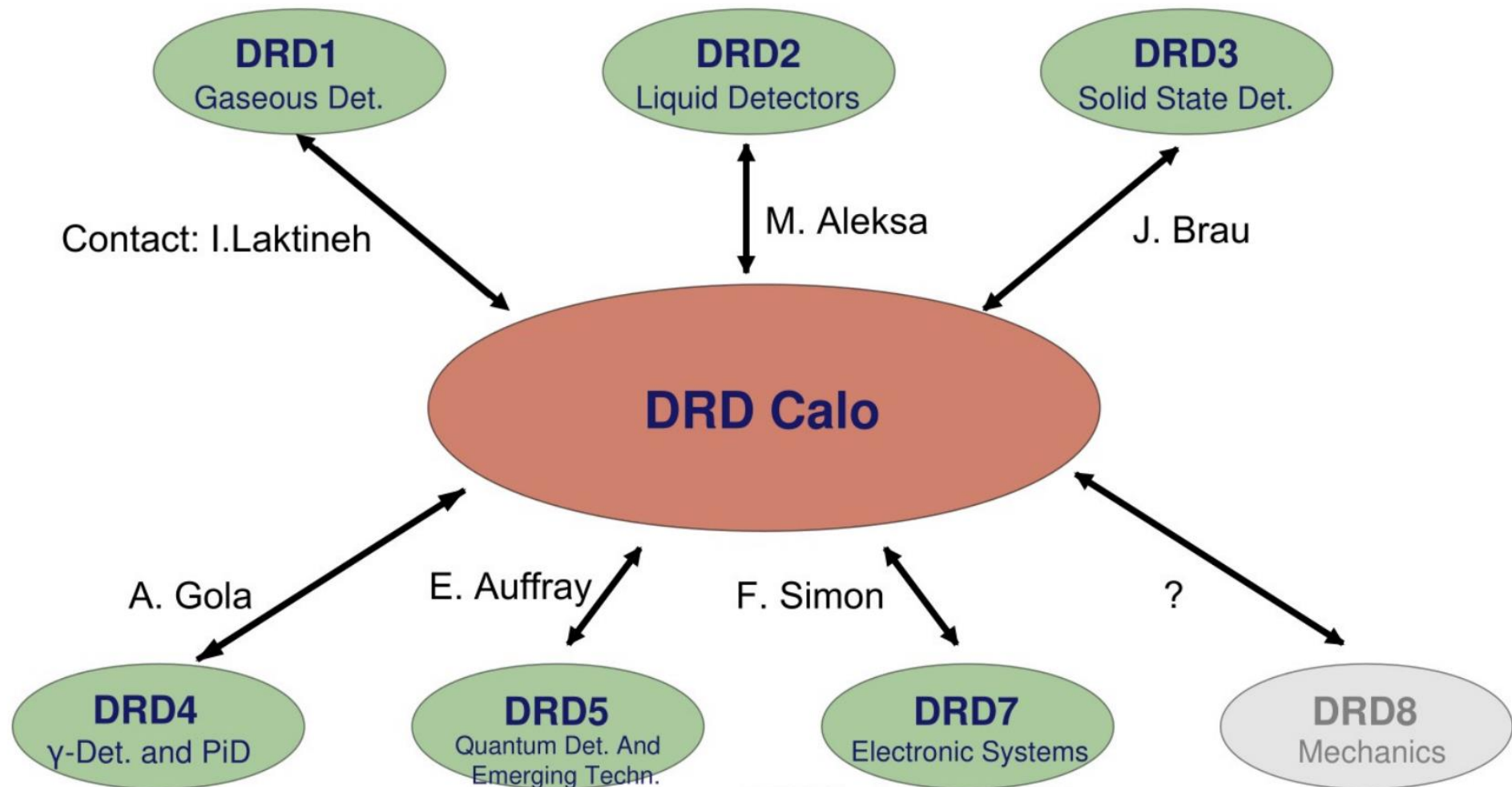


HF20 Preparation - Discussion

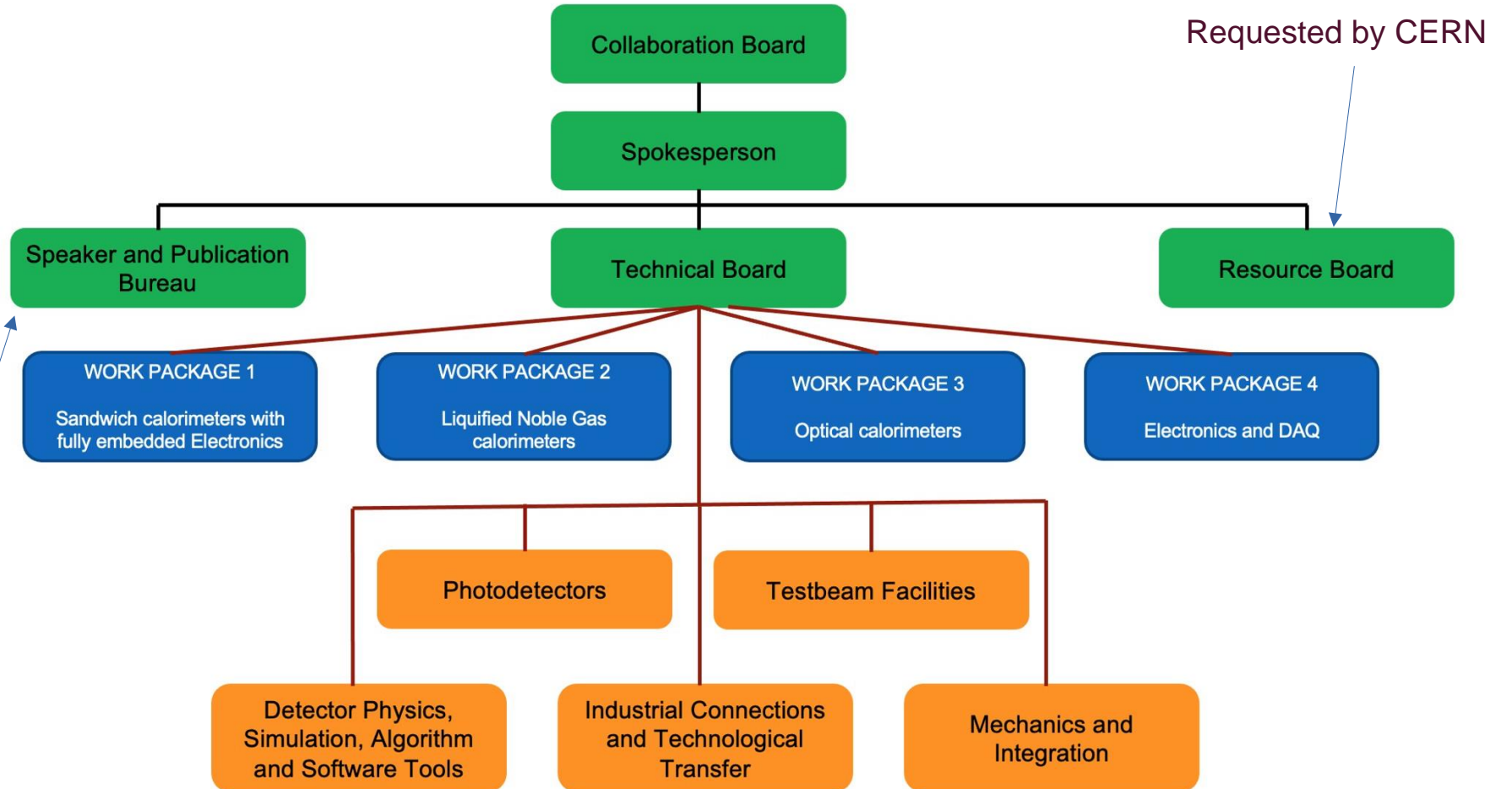


HF20 Preparation - Discussion

MANAGEMENT:

WORK PACKAGES:

WORKING GROUPS:

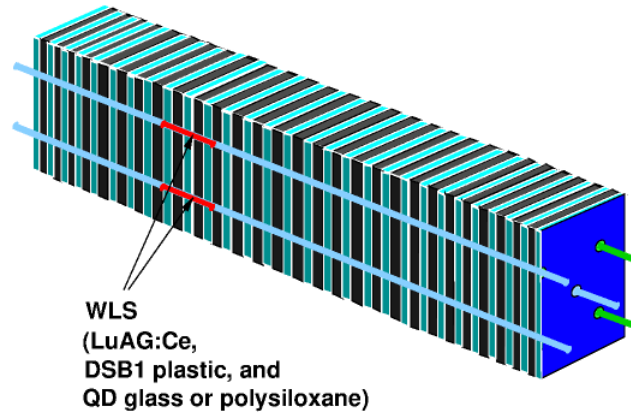
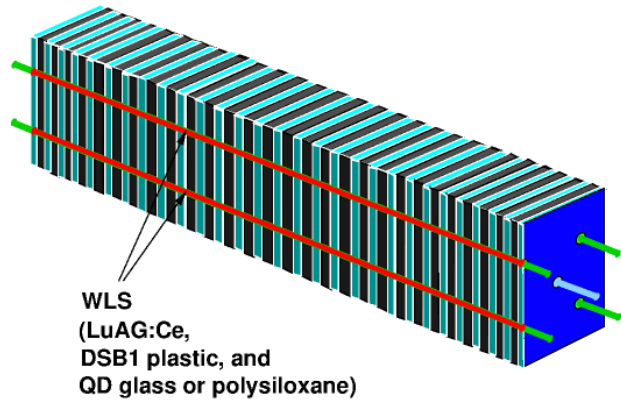


*SPB also in charge for dissemination

HF20 Preparation - Discussion

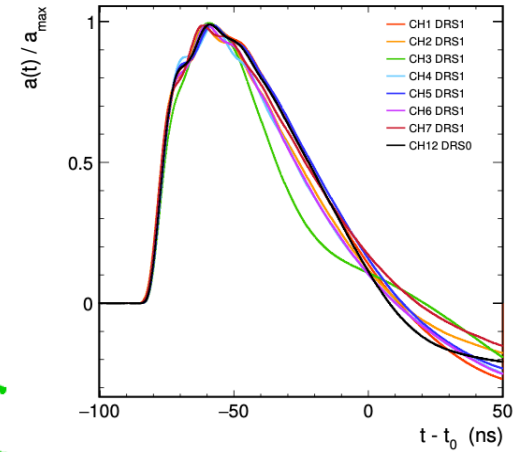
RADiCAL example, using WLS capillaries

Energy resolution - detect full EM shower - low gain signals

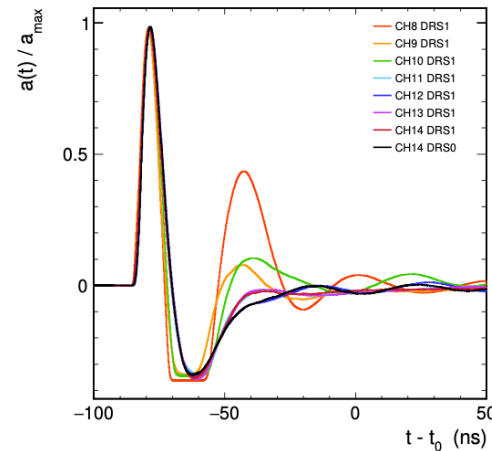


Position and Timing resolution - selected locations in EM shower depth. Position uses local energy deposition

High and Low gain signals needed.



Low gain for energy and position



High gain for timing

HF20 Preparation - Discussion

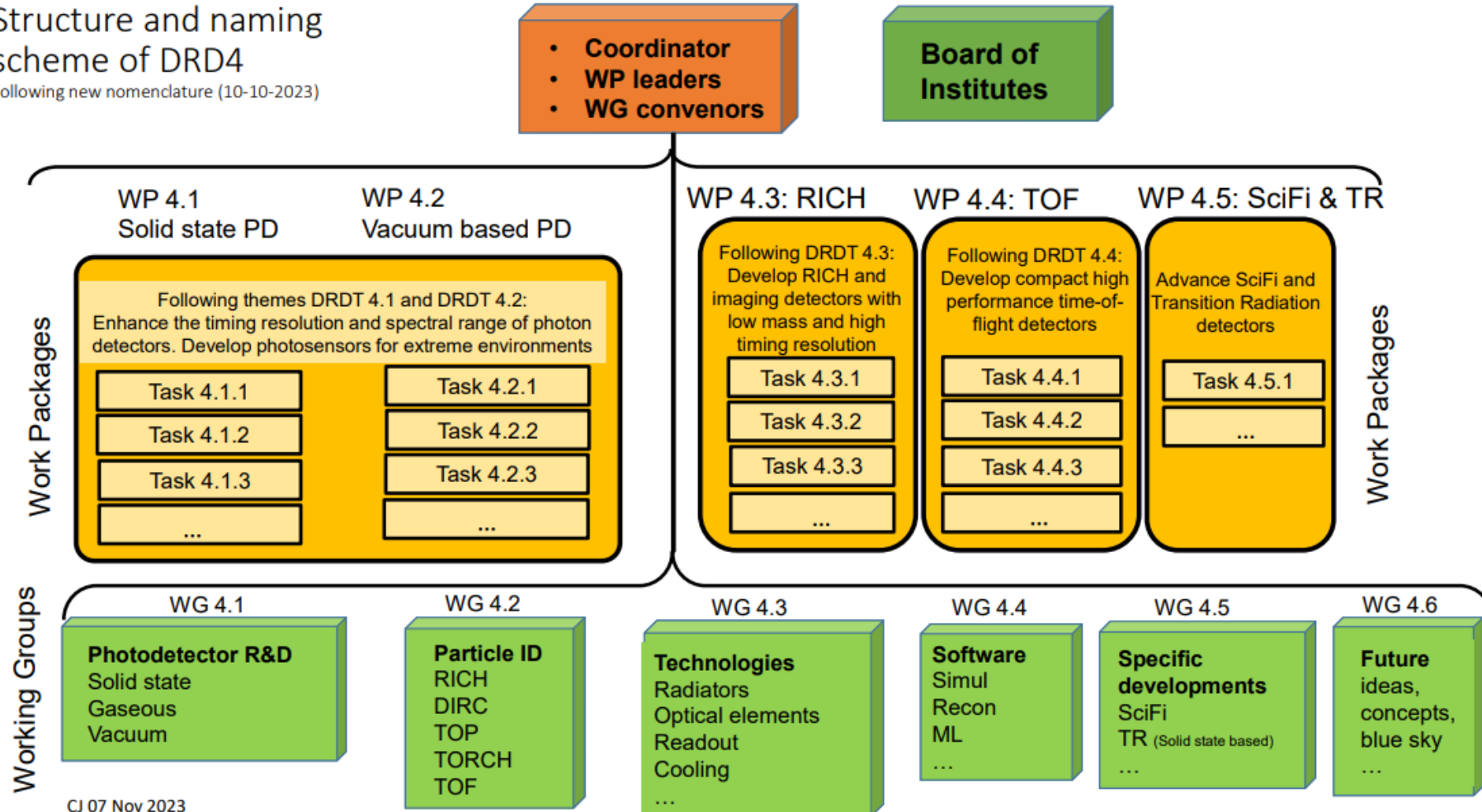
RADICAL

Subtask	Project	Optical Source	Photosensor Choice	Application
3.1.1	HGCCAL	BGO, LYSO	SiPM	e+e-
3.1.2	MAXICC	PWO, BGO, BSO	SiPM	e+e-
3.1.3	Crilin	PbF ₃ PWO-UF	SiPM	μ+μ-
3.2.1	GRAiNITA	ZnWO ₄ BGO	SiPM	e+e-
3.2.2	SpaCal	GAGG, organic	MCD-PMT, SiPM	e+e-/hh
3.2.3	RADiCAL	LYSO, LuAG, DSB1	SiPM	e+e-/hh
3.3.1	DRCal	PMMA, Plastic	SiPM, MCP-PMT	e+e-
3.3.2	TileCAL	PEN, PET	SiPM	e+e-/μ+μ-/hh
3.4.1	ScintCAL	Various	Various	Optical material development
3.4.2	CryoDBDCal			Low Temperature application

HF20 Preparation - Discussion

Structure and naming scheme of DRD4

Following new nomenclature (10-10-2023)



CJ 07 Nov 2023

HF20 Preparation - Discussion

- WG6 will be the gate of the Collaboration for new ideas
- WG6 will be the place where new concepts, either from the Collaboration or from outside, will be introduced and discussed
- WG6 coordinators will seek for expertise in the other WGs to evaluate the new ideas

Interested industrial partners so far:

- PHOTONIS (Innovate photodetection technologies)
- WEEROC (Innovate readout electronics for photodetectors)
- HFR

9 groups expressed interest in joining Working Group 6 :

- Iowa (New photodetectors development)
- Genova (Study new RICH designs for future colliders)
- Yerevan (Development of RF-PMTs)
- Lyon (Nanochannel Plate concept and associated readout)
- Seoul (Investigation of InGaAs / GaAs technology for photon detectors)
- IRFU-CEA (Development of RF-PMTs)
- Ferrara (Use Timepix4/5 to improve timing and spatial resolution)
- JSI Ljubljana (Develop innovative non-standard methods and setups)
- Bucharest (Develop innovative readout electronics)