Assay status update

Krzysztof

Assay status – new requests (8 +)

- Field cage resistors 1GOhm (ID 291, 5th April)
- New cryostat materials batch (ID 292, 5th April)
- Silver loaded epoxy (ID 294, 8th April)
- Donchamp acrylic Line1 (ID 289, 12th March)
- Acrylic plates for veto sectors (ID 290, 12th March)
- Pyralux PCB CCL (new process without solder) (ID 293, 6th April)
- Solder paste ChipQuik (ID 295, 8th April)
- Pyralux/Invar/Pyralux PCB (later this week)

Assay status – new requests (+ 5)

- 3D printed connector housing (Formlabs resin, ID 283)
 - ICP-MS@?
- Stainless Steel Nironit, 1.4301 (ID 48, 5th December 2018)
 - HPGe @ Temple ?
- Electronic components for PDMs and OTs passives (capacitors) (ID 285, 27th January 2018)
 - T55 Tantalum capacitors (defined, HPGe @ LNGS available for a 4 g sample)
- Fused Silica Wafer (ID 288, 12th February 2019)
 - HPGe @ LNGS (ongoing)
 - ICP-MS @ CIEMAT
- Electronic components for PDMs and OTs passives (resistors) (ID 286, 28th January 2018)
 - Ongoing (ERA-2A family done, worse results than TE, 3 + 4 more samples)
- Another 10 MOhm resistor candidate (ICP-MS @ LNGS)

Assay status – Recently done (0)

- ICP-MS/Po/HPGe missing:
 - Luvata Copper (ID 274, 25th Sept. 2018)
 - Mother board strip (ID 280, 15th Oct. 2018)
 - FEP pellets (ID 65, 29th June 2018)
 - Solder Paste Indalloy 290 (ID 43, 27th Nov. 2017)
 - Clevios conductive polymer (ID 66, 30th June 2018)

Assay status – other

- UVT Acrylic (ID 40, 5th June 2017)
 - ICP-MS @ CIEMAT
 - HPGe @ CIEMAT
- Solder Paste Indalloy 290 (ID 43, 27th Nov. 2017)
 - ICP-MS @ CIEMAT
 - HPGe @ CIEMAT
- Purchase of passive (R, C) components and active (ICs) by Grzegorz done, Po screening ongoing, remaining pieces for ICP-MS @ ??
- Solder paste Alpha WS-820 (ID 287, 30th January 2019) cancelled

Assay status – awaiting

- Assays to be performed:
 - VETO, TPC
 - PDM (LNGS/Princeton):
 - Pyralux/Invar/Pyralux (PIP) will arrive this week
 - · Tiles in the final doping
 - Steering module (BNL):
 - The chips are huge: HV5523 is ~500 mg, HV3418 is ~1000 mg, might be too (radio)hot
 - The main connector looks "enormous", probably too (radio)hot
 - Optical readout (driver/receiver, OT, Cagliari):
 - Fiber material not screened
 - Final fiber not screened for Rn
 - (Almost) no chips screened
 - Missing HPGe and lower chain results for the fiber
 - Cables (Milano)
 - Nearly nothing (except FEP pellets)

Assay queues

 A "plugin" to the database will be implemented in the future to handle the queues of samples in the institutions

• LNGS:

- 6 items for ICP-MS
- 3 items for HPGe
- Kraków
 - 17 items for Po extraction

Resistors – selection chart

							l		l	
	Value [Ω] ount/PDM)	3 – 10 M (48)	5.11 (18)	10 (16)	50 (15)	10.7 k (11)	250 (6)	0 (5)	1 k (3)	750 (1)
Series	(size)	50 M								
CPFA	(0402)									
CPF	(0402)									
CRG	(0402)		6.							
716-8153	(0402)		???							
HVC	(0603)			1.						
ERA-2A	(0402)			0.1%, thin	0.1%, thin	0.1%, thin	0.1%, thin	i !		
RR05	(0402)		*	0.5%, thin						
RG10	(0402)		5.		0.1%, thin				0.5%, thin	
RL05	(0402)		1%, thin		8.					
RC	(0402)			4.				5%, thick		
RT	(0402)	,		0.5%, thin	0.5%, thin	0.1%, thin	0.1%, thin		0.5%, thin	
MMA	(0204)	1%, thin, melf	2.							
CRCW	(0603)	0.5%, thick	7.							
SMM	(0204)	1%, thin, melf	3.							
₩694/2019	(0603)	1%, thin								8