### COMPASS status report

### Jan Matoušek

Faculty of Mathematics and Physics Charles University, Prague, Czechia

 $15.\ 7.\ 2021$  Weekly PS and SPS users meeting





CHARLES UNIVERSITY Faculty of mathematics and physics



## Spectrometer commissioning status





The new  $^3\mathrm{He}$  pumping pipe.



Silicon beam telescope mounted next to the target loading platform to test the refurbished  $LN_2$  cooling.

- The new <sup>3</sup>He pumping line
  - leak-checked yesterday,
  - being mounted today.
- All detectors mounted, except the beam telescope.
- All detectors with nominal gas, except RICH.
- Readout is set up in almost all detectors.
- HV on in almost all detectors.
- First beam delivered this week.
  - First M2 beamline setup (the final tuning waiting for the beam telescope).
  - First trigger timing.
- Small problems with access command and magnets, being resolved.

# Spectrometer commissioning status



Detectors														
Name Z (cn	n) Mount	ted Gas/Cooli	na LV	HV	Surve	y Murphy	Name	Z (cm)	Mounte	Gas/Cooling	LV	HV	Survey	Murphy
BM01 -1371			yes	yes	?	yes		1556.55			yes	по	?	
BM05 -1304	0.4 yes		yes	yes	?	yes	PA02	1584.4	yes	yes	yes	no	?	
BM02 -1237	6.6 yes	_	ves	ves	?	yes	GM06	1593.5	yes	yes	ves	no	_	ves
BM03 -7370	.0 ves	-	ves	ves	?	ves	HG02	1602.0	ves	_	ves	ves	ves	ves
BM06 -7080	.0 yes		yes	yes	?	yes	PA03	2043.5	yes	yes	yes	no	?	partially
BM04 -6128	.2 yes		yes	yes	?	yes	GM07	2053.15	yes	yes	yes	no		no
FI01 -759.	0 ves	_	ves	ves	?	ves	PA04	2075.1	ves	ves	ves	no	?	
VI01 -721.	0 yes		yes	yes	no	?	GM08	2083.0	yes	yes	yes	no		no
FI15 -633.	6 no	_	yes	no	no	yes	PA05	2103.7	yes	yes	yes	по	?	partially
SI01 -600.	05 partial	ly yes	no	no	no	no	GM09	2112.05	ves	yes	yes	no	_	yes
SI02 -547.	65 partial	ly yes	no	no	no	по	GP03	2117.55	yes	yes	yes	no	_	
SI03 -498.	7 partial	ly yes	no	no	no	по	HO03	2148.0	yes		yes	yes	?	yes
FI02 -464.	6 no	_	yes	no	no	yes	FI07	2170.9	yes	-	yes	yes	?	yes
VI02 -450.	0 no	-	ves	no	no	no	DW01	2802.9	ves	ves	ves	no	ves	ves
FI03 54.4	yes		yes	yes	yes	yes	DW02	2834.2	ves	yes	yes	yes	по	yes
MP01 146.3	5 yes	yes	yes	yes	yes	yes	DW03	2864.4	yes	yes	yes	yes	no	yes
DC00 164.0	62 ves	ves	ves	ves	ves	ves	DW04	3008.6	ves	ves	ves	ves	no	ves
MP02 195.8	ves	ves	ves	ves	ves	ves	DW05	3038.7	ves	ves	ves	ves	по	ves
FI04 214.5	yes		yes	yes	yes	yes	PA11	3069.6	yes	yes	yes	no	?	
MP03 245.5	yes	yes	yes	ves	ves	ves	PA06	3100.2	yes	yes	ves	no	?	
DC01 263.9	yes	yes	yes	yes	yes	yes	GM10	3109.35	yes	yes	yes	no	_	yes
DC04 467.1	ves	ves	yes	no	yes		DW06	3130.2	yes	yes	yes	yes	по	yes
							FI08	3168.0	yes	-	yes	yes	?	yes
GM01 479.2	yes	yes	yes	no	-	yes	EC02	3325.2	ves		yes	yes	?	
DC05 506.7	yes	yes	yes	yes	yes	partially								
GM02 518.4		yes	yes	no	-	yes		3566.0	yes	-	yes	yes	?	yes
ST03 546.0	yes	yes	yes	yes	yes	yes	HO04	3974.15	yes		yes	yes	?	yes
GM03 563.9	yes	yes	yes	no	-	yes	HM04	4026.8	yes	-	yes	yes	no	yes
HG01 582.0	yes	-	no	no	no	по	HL04	4057.4	yes	-	yes	yes	no	yes
FI05 600.6	yes		yes	yes	yes	yes	PB01	4190.6	yes	yes	yes	yes	yes	
RI01 610.0	yes	no	yes	partial	y yes	partially	PB02	4207.6	yes	yes	yes	no	yes	partially
PS01 951.0	yes	yes	yes	no	yes	partially	MB01	4280.87	yes	yes	yes	yes	yes	yes
GM04 960.6	5 yes	yes	yes	no	-	yes	PB03	4394.2	yes	yes	yes	no	yes	partially
DR01 1001	9 yes	yes	yes	no	yes	по	PB04	4411.2	yes	yes	yes	no	yes	partially
DR02 1020	1 yes	yes	yes	no	yes	no	MB02	4487.97	yes	yes	yes	yes	yes	yes
EC01 1107	4 yes	-	partial	lly partial	y?	partially	PB05	4614.1	yes	yes	yes	no	yes	partially
HC01 1263	4 yes	-	yes	yes	?	yes	PB06	4631.1	yes	yes	yes	no	yes	partially
GP02 1376	9 yes	yes	yes	по	_	partially	GM11	4713.35	yes	yes	yes	no	-	yes
PA01 1388	2 yes	yes	yes	no	?	partially	HM05	4780.6	yes	_	yes	yes	no	yes
GM05 1396	3 yes	yes	yes	no	_	yes	HL05	4808.5	yes	-	yes	yes	по	yes
FI55 1418	5 yes	_	yes	yes	yes	yes	HIOS	5100.5	yes	_	yes	yes	_	yes
MA01 1446	45 ves		yes	no	?									
	,		,											

## Spectrometer commissioning status



### • This week

- Finish Silicon installation.
  - Finish debugging of front-end electronics.
- M2 beamline setup.
- Setting up triggers.
- Week 29 (from 19. 7.)
  - Setting up triggers.
  - Detector commissioning with beam.
- Week 30 (from 26. 7.)
  - First alignment.
  - Finalisation of the spectrometer commissioning.
  - ECAL calibration with e<sup>-</sup> beam.
  - Specrometer fully ready by 31. 7.

### Later

- Trigger efficiency measurements.
- $\bullet$  Unpolarised SIDIS test online reconstruction, data stability monitoring...
- Polarised target
  - Has to warm up and cool down.
  - Schedule was already tight after the vacuum problem.
  - Experts doing the best...
  - Rough estimate: mid-August (2–3 weeks delay).