

Accelerator Frontier : *White Papers etc*

Snowmass Frontiers Mtg, March 18, 2022

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AF White Papers as of This Morning

- **35 total on the Wiki**

- AF0 (general) - 8
- AF1 (beam phys) - 2
- AF2 (neutrino) - 4
- AF3 (Higgs Fact) - 4
- AF4 (multi-TeV) - 9
- AF5 (rare proc) - 3
- AF6 (advanced coll.) - 0
- AF7 (technology) – 12

(many has not appeared yet – see next)

some 20% submitted did not have arXiv experience (→ needed endorsement)

no Ukraine/Russia related issues known so far...

- **Expected ~80 total**

- *Many (~20) will be delayed by 2 or more weeks*

Just one example: AF07magnets WPs

30 WP in work; 10 in arXiv, 2 appeared on Wiki

Group	Lead author	Email	Topic/Title	Status (*)	Arxiv
1	Prestemon	SOPrestemon@lbl.gov	US MDP - general magnet R&D		
1	Apollinari	Apollina@fnal.gov	Directed magnet R&D proposal (LEAF)	1	2203.07654
1	Ambrosio	GiorgioA@fnal.gov	Magnet cost reduction		2203.07352
1	Vedrine	Pierre.Vedrine@cea.fr	Summary of EU magnet R&D roadmap	1	2203.08054
1	Ogitsu	Toru.Ogitsu@kek.jp	Accelerator magnet R&D in Japan		
2	Larbalestier	larbalestier@asc.magnet.fsu.edu	US conductor R&D status/plans		
2	Selvamanickam	vselvama@Central.UH.EDU	REBCO HTS tapes		
3	Zlobin	Zlobin@fnal.gov	Higgs factory magnets		
3	Zlobin	Zlobin@fnal.gov	Muon collider magnets		
3	Wang	XRWang@lbl.gov	REBCO magnet technology	1	2203.08736
3	Gupta	Gupta@bnl.gov	Common coil dipole magnets	1	2203.0875
3	Shen	TShen@lbl.gov	Bi-2212 magnet technology		
3	McIntyre	p-mcintyre@tamu.edu	Hybrid REBCO magnets	1	2203.08132
4	Baldini	Mbaldini@fnal.gov	Quench detection w/fiber optics	1	2203.08309
4	Stoynev	Stoyan@fnal.gov	Tech development w/subscale models	2	2203.07274
4	Marchevsky	MMartchevskii@lbl.gov	Diagnostics for future colliders		
4	Marchevsky	MMartchevskii@lbl.gov	Acoustic diagnostics for training studies		
4	van Weelderren	rob.van.weelderren@cern.ch	Cryogenics for high field magnets		
5	Sasaki	ken-ichi.sasaki@kek.jp	Detector solenoids development	1	2203.07799
5	Ning	Ningfp@ihep.ac.cn	Detector solenoids including HTS		
6	Barzi	Barzi@fnal.gov	High energy & high luminosity gg	1	2203.08353
6	Piekarz	hpiekarz@fnal.gov	Fast cycling HTS magnets	2	2203.06253
6	Brouwer	lnbrouwer@lbl.gov	Large momentum acceptance magnets		

AF Priorities Now

- Get the remaining WPs submitted
- Make sure that all/most delayed WPs accounted
 - *Our TGCs will treat all WPs submitted by 04/01 equally*
- Start Topical Group Summaries – discussions
- Participate in MC Forum, e+e- Forum and ITF reports/discussions:
 - *Please, activate liaisons to invite AF to your meetings!*
- Prepare for the CSS in Seattle
 - *Compile AF program (greatly affected by plans of EF, NF, RPF and TF)... poster sessions needed...*
 - *Still not clear on CSS duration - ?? ...attendance?*
 - *Pre-CSS discussions in AF (eg ITF)*

From M.Peskin: *I sent the template for the Topical Group reports to the conveners last fall. I'll send this notice out again as a reminder.*

<https://www.slac.stanford.edu/~mpeskin/SnowmassBook.html>