

DUNE APB Meeting

Messier / IU

16 December 2020

DUNE Publications

Category	docdb	Title	Lead authors	arXiv	Journal / Conference	Review stage	Closing date
DUNE Publication	17320	BSM Physics Paper	Lisa W Koerner, Vitaly Kudryavtsev, Alex Sousa, Yun-Tse Tsai, Jae Yu	https://arxiv.org/abs/2008.12769	EPJC	Submitted with journal	
DUNE Publication	16781	Supernova Burst Neutrino Physics TDR-based paper	Kate Scholberg	https://arxiv.org/abs/2008.06647	EPJC	Submitted with authors	
DUNE Publication	18336	Probing KDAR in the Sun with DUNE	Author Non-Collaborator , Alex Dvornikov, Jason Kumar, Jelena Maricic		None	- with authors	
DUNE Publication	19840	protoDUNE detector paper	Stefania Bordoni, Regina Rameika, Bryan J Ramson, Francesca Stocker, Serhan Tufanli		None	- with APB	
Technical/Limited auth.	20303	GPU-accelerated machine learning inference as a service for computing in neutrino experiments	Author Non-Collaborator , Tingjun Yang	https://arxiv.org/abs/2009.04509	None	Submitted with journal	
Technical/Limited auth.	20840	On the Reflectivity of 128 nm Photons off Stainless Steel	Stuart Mufson		None	Submitted with journal	
Technical/Limited auth.	21015	Calibration of calorimetric measurement in a liquid argon time projection chamber	Tingjun Yang	https://arxiv.org/abs/2012.01319	INST	Submitted with journal	
Technical/Limited auth.	18358	PREDICTING COSMIC AND BEAM RADIOACTIVE BACKGROUND FROM MUONS AND NEUTRONS FOR PROTODUNE-DP DETECTOR AND CROSS SECTIONS FOR OTHER SOURCES OF BACKGROUND	Author Non-LBNF		None	- with working group	
DUNE Publication	14125	Neutrino interaction classification with a convolutional neural network in the DUNE far detector	Saul Alonso Monsalve, Leigh Whitehead	https://arxiv.org/abs/2006.15052	PRD	Published -	
DUNE Publication	16877	DUNE long-baseline oscillation sensitivities	Daniel Cherdack, Chris Marshall, Ryan Patterson, Mayly C. Sánchez, Callum Wilkinson, Elizabeth Worcester	https://arxiv.org/abs/2006.16043	EPJC	Published -	
DUNE Publication	17316	First results on ProtoDUNE-SP liquid argon time projection chamber performance from a beam test at the CERN Neutrino Platform	Flavio Cavanna, Thomas Junk, Tingjun Yang	https://arxiv.org/abs/2007.06722	JINST	Published -	
Technical/Limited auth.	11050	FELIX based readout of the Single-Phase ProtoDUNE detector	Eric D Church, Frank Filthaut, Enrico Gamberini, Giovanna Lehmann-Miotto	https://arxiv.org/abs/1806.09194	CHEP2018	Published -	
Technical/Limited auth.	11098	The protoDUNE Single Phase Detector Control System	Antoine Kehrli, Giovanna Lehmann-Miotto, Xavier Pons, Sylvain Ravat, Manuel Rodriguez		CHEP2018	Published -	

Proceedings

Richie Diurba	diurb001@umn.edu	Energy calibration	ICHEP 2020	19306	15-Nov-2020	F. Filthaut
Richie Diurba	diurb001@umn.edu	Purity monitoring	ICHEP 2020	19309	15-Nov-2020	F. Filthaut
Christoph Alt	christoph.alt@cern.ch	Nucleon decay s	ICHEP 2020	19318	15-Nov-2020	F. Filthaut
Victor Pec	v.pec@sheffield.ac.uk	Calibrating the D	ICHEP 2020	19347	15-Nov-2020	F. Filthaut
Clara Cuesta	clara.cuesta@ciemat.es	Core-Collapse S	ICHEP 2020	19344	15-Nov-2020	I. Sarcevic
Miguel García Peris	migarpez@ific.uv.es	Cryogenic instru	ICHEP 2020	20810	15-Nov-2020	F. Filthaut
Mateus Carneiro	mateusfcarneiro@gmail.co	Neutrino interact	ICHEP 2020	20819	15-Nov-2020	F. Filthaut
Heng-Ye Liao	liao@phys.ksu.edu	Hadron-argon cr	ICHEP 2020	20123	15-Nov-2020	J. Torres de Mell
Ranjan Dharmapalan	ranjand@hawaii.edu	Moveable Therm	ICHEP 2020	20882	15-Nov-2020	F. Filthaut
Yeon-Jae Jwa	yj2429@columbia.edu	Neutron-antineu	ICHEP 2020	20894	15-Nov-2020	A. De Roeck
Stefania Bordoni	Stefania.Bordoni@cern.ch	Construction, ins	ICHEP 2020	19338	15-Nov-2020	F. Filthaut
Doojin Kim	immworry@gmail.com	Beyond the Stan	ICHEP 2020	20921	15-Nov-2020	F. Filthaut
Junze Liu	junzel1@uci.edu	Deep-Learning-E	NeurIPS 2020	20976	30-Nov-2020	

ProtoDUNE detector Paper

- At our last meeting we decided this should be a full authorship DUNE publication
- Mark Convery and Laura Fields will chair the ARC
- Need to round out rest of committee: Several suggestions: <https://forms.gle/cuhhenRtMMAYVNih8>
- Following this meeting, Frank and I will order the names based on APB input and begin contacting people.

Near Detector CDR Authorlist

- We need to produce an author list for the Near Detector TDR. Goal is to have this ready early in January
- Proposal: Include all qualified authors that signed the Far detector TDR + all authors who have qualified as of ~December 20th
- Will need to send to IB and update with corrections esp. for technicians and engineers.

ProtoDUNE-SP Physics Paper

- This paper was published in JINST on 3 December 2020.
- This was the first paper where we attempted to update the TDR list.
- Since the paper appeared a few people who were included on the FD TDR have contacted us about why they were not included. Following up on these cases revealed what I think are some weaknesses in how we “cut” author lists both in how people are added and how they leave the author list.

Handling how people leave the author list

- Currently people drop off the author list quietly. If they also drop off dune-collab they will not know papers are under review and they may qualify for authorship.
- Maxine and I discussed updating the author list ~monthly. We would send an email to individuals whose authorship status has lapsed and send a summary to IB reps.
- We also would like to start a “dune-legacy” email list for DUNE legacy authors. People whose status has changed from author to non-author in the past N (2? 5?) years would be added to this list. This list would be notified when publications from DUNE are submitted to the arXiv. If they have specific contributions they would have an opportunity to opt-in before the paper went to final proofs.

How people are added to the author list

- Here I have to admit to a misunderstanding that I expect others may have too.
- To cut author lists we rely on the collaboration database. Individuals are added to that database when they join the collaboration. They are qualified to become authors 1 year after their first reported effort.
- However, they do not become authors automatically once they qualify; that change of status requires an action from an IB representative. Some IB representatives are more attentive to this than others.
- For the ProtoDUNE-SP paper we retrospectively identified 26 people who were qualified to be authors, but were not included on the paper.
- Proposal going forward is to make a report monthly of DUNE collaborators who have qualified for authorship and push this to IB reps. who will then have an opportunity to request that their people become authors.

Some decisions

- We have 2 (maybe 3) people who made specific contributions to the ProtoDUNE-SP paper but were not included in the author list.
- We have 31 people who become inactive between the FD TDR and the protoDUNE-SP paper. Unclear how many of these made specific contributions to protoDUNE-SP.
- We have 26 people who satisfied the 1-year requirement for authorship at the time of the protoDUNE-SP paper but who were not included in the author list because no request was made for a change in their status.

docdb APB Topics and Dashboard

- To help make publications more visible to the collaboration and to make the status of publications more visible to everyone (APB, authors, working groups, ...) I've asked to have several Topics added to docdb.
- Clicking on any of these will show all documents meeting that criteria.

Authorship and Publications

- Paper type
 - Full authorship (7)
 - Limited authorship (16)
 - Proceedings
 - Supplemental
- Policies and procedures (2)
- Review lead
 - with APB (2)
 - with ARC
 - with Authors (3)
 - with Collaboration (2)
 - with Journal (5)
 - with WG (1)
- Review stage
 - APB review (2)
 - ARC review (2)
 - Journal review (6)
 - Posted (16)
 - Published (15)
 - WG review (1)
 - Withdrawn

Clicking
“Full
authorship”

DUNE- doc-#	Title	Author(s)	Topic(s)	Last Updated
17320-v7	BSM Physics Paper	Lisa W Koerner et al.	with Journal Proton Decay Posted Journal review Full authorship BSM	15 Dec 2020
17316-v14	First results on ProtoDUNE-SP liquid argon time projection chamber performance from a beam test at the CERN Neutrino Platform	Flavio Cavanna et al.	ProtoDUNE Detector Performance Posted Published Full authorship	15 Dec 2020
14125-v12	Neutrino interaction classification with a convolutional neural network in the DUNE far detector	Saul Alonso Monsalve et al.	Physics Analysis Neutrino Oscillations Posted Published Full authorship Far Detector Sim/Reco	15 Dec 2020
16877-v7	DUNE long-baseline oscillation sensitivities	Daniel Cherdack et al.	Physics Neutrino Oscillations Posted Published Full authorship	15 Dec 2020
16781-v2	Supernova Burst Neutrino Physics TDR-based paper	Kate Scholberg	Physics Posted Journal review with Authors Full authorship	15 Dec 2020
19840-v4	protoDUNE detector paper	Stefania Bordoni et al.	Photon Detection HV ProtoDUNE Installation/Integration On-site Assembly and Installation with APB Full authorship DAQ ARC review Electronics Field Cage Argon and Cryogenics Instrumentation TPC Single Phase	22 Nov 2020

Using APB tags I can automatically extract a “Dashboard”:

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If we had and papers open for collaboration comment they would appear highlighted at the top.

So far, I've added all the tags for Full and Limited authorship papers. Will do proceedings next. I'm hoping to have this posted privately on the DUNE webpages and to have it updated automatically.