



# DPF Outreach Ideas for the 2020 APS April Meeting

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- April 2020 meeting has a great location: Washington, D.C.
- Many schools and research institutions are close by
- Many museums are close by
- Much inspiration was derived from the outreach activities that the DPP hosts each year [1] and personal correspondence with Arturo Dominguez, E&O chair of the DPP



- Create a dedicated website external to the APS DPF webpage
- Create a Facebook page, Instagram and Twitter account
- We can have a dedicated account manager responsible for updating and posting 1-2 times a week
- Can use these platforms to increase awareness of events and other activities before and during the conference, as well as exciting news in the particle physics community



- Fundraising is essential for establishing a great workshop for high/middle school science teachers and public outreach events
- The DPP spends about \$45k per year on outreach events (~10-30k per event)
- Fundraising effort should begin immediately to ensure adequate funds are available for next April
- Could also have different gifts for each level of donations; e.g., donate \$50+ and receive a DPF mug, donate over \$250+ and receive a special DPF lanyard for the April meeting, travel tumbler, etc.; all donation tiers will receive recognition on the future DPF webpage and newsletters
- Could also have a special founding members recognition (first 25 donors receive special recognition in the newsletter, a special founders mug with donation, etc.)
- If the donations are large enough, perhaps we could have an invitation-only reception for the donors at the next April meeting



- Could be a day long event on one of the days of the April meeting
- Send out a questionnaire to local schools to gauge interest
- Invite high school/middle school teachers to attend a workshop about QuarkNet
  - Can specifically show how to integrate QuarkNet activities into their curriculum and how it aligns with Next Generation Science Standards (NGSS)
  - Can invite the teachers to attend a mini-symposium or featured talks specific to DPF at the April meeting
  - Lunch with DPF scientists
- Demos using the QuarkNet detectors or tutorials on how to build your own cloud chamber
- Develop a questionnaire to assess the overall outcome of the workshop



- Have several speakers over the course of one day give talks geared toward the public
- These talks would potentially highlight particles/fields basics, detector basics/applications, new frontiers in particle physics research, etc.
- Another lecture series could also occur, “Particle Physics On Tap”
  - Can host talks at a local brewery in the D.C. area
  - This type of event is very popular at locations around the world (e.g., [2])



- Smithsonian Museum of Natural History, Smithsonian Air and Space Museum, National Geographic Museum
- The Q?rius Science Education Center is located at the natural history museum; could be a good venue for teaching students from local schools about particle physics
- Can have operating cloud chambers (or spark chambers?) set up with descriptions identifying the different particles and decays that can be seen
- National Museum of Health and Medicine is also there; could have exhibits on the intersection of particle physics/radiation detection and medicine (proton beam therapy, MRIs/CAT/PET technology, etc.)
- Many great resources for public science demonstrations or activities for students can be found on the International Particle Physics Outreach Group (IPPOG) website [3]



- Once we finalize what we would like to do for the April meeting, I will create a more detailed plan/budget. A tentative to-do list follows below:
- Find pricing for webpage (Wix: ~\$20-30/month, SquareSpace: ~\$12-30/month, etc.); create social media accounts
- Start preparing posts for the various social media accounts so new posts are created on a weekly basis
- Finalize incentive plan for education and outreach fund (we will need to fill out the appropriate paperwork so that donations are tax-deductible)
- Contact local (D.C. area) QuarkNet members to see if they are interested in collaborating with the DPF
- Contact the local museums (as soon as possible) to get an exhibit space allocated
  - Workshop on QuarkNet for science teachers or public science demonstrations could also occur at the conference venue  $\Rightarrow$  contact conference organizers



- [1] "DPP," APS Division of Particle Physics website, <http://www.apsdpp.org/>.
- [2] "Astronomy on Tap," <https://astronomyontap.org/>.
- [3] "The International Particle Physics Outreach Group (IPPOG)," <http://ippog.org/>.

