CPAD

DPF Instrumentation Award

The **DPF Instrumentation Award** and **DPF Instrumentation Early Career Award** are bestowed annually to honor exceptional contributions to instrumentation advancing the field of particle physics through the invention, refinement, or application of instrumentation and detectors. The awards recognize accomplishments in one or more of the following areas:

- Conceptualization and development of unique instrumentation that has made a significant impact on the field.
- Demonstration of the innovative use of instrumentation.
- Stimulation of other researchers to use new techniques and methods.
- Authorship of research papers or books that have had an influential role in the use of instrumentation.

https://engage.aps.org/dpf/honors/prizes-awards/instrumentation-award

https://cpad-dpf.org/?page_id=750

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DPF Instrumentation Award

2022 Awards Committee

Andy White (chair, DPF)

Kim Palladino (vice chair, CPAD)*

Dan Dwyer (CPAD)*

Jennifer Raaf (DPF)

Paolo Rumerio (DPF)

Jinlong Zhang (CPAD)

Minfang Yeh (2021 Award winner)

Kerstin Perez (2021 Early Career Award winner)

With much help from
Peta Merkel and Karsten Heeger
Thank you!

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APS Division of Particles & Fields DPF

Winner – Senior category: Dr. Bo Yu (BNL)

Dr. Yu is given this award for his definitive contributions to the development of liquid Argon time-projection chambers for neutrino experiments, and for his leadership and creative contributions to the designs of MicroBooNE, ProtoDUNE-SP, SBND, and DUNE. Dr. Yu has made essential contributions to the electrode concepts and many aspects of the electrical and mechanical designs. This work on all areas of the technology of liquid Argon TPCs has enabled the effective detection of particles from neutrino interactions. The committee recognized Dr. Yu for his breadth of innovative contributions and essential developments over an extended period.

Winner – Early Career category: Dr. Daniel Winklehner (MIT)

Dr. Winklehner is given this award for the development of new accelerator technology enabling an order of magnitude increase in the current delivered from a compact proton cyclotron. This achievement was made possible by Dr. Winklehner's discovery of induced vortex motion in cyclotron beams, and advances in beam dynamics allowing the use of a radio-frequency quadrupole for efficient axial injection into a compact cyclotron. This work was carried out using artificial intelligence techniques and has enabled the realization of the IsoDAR experiment that will play a decisive role in the search for sterile neutrinos.