

Snowmass Joint Workshop on New Physics Opportunities with Neutrino
Experiments: Theoretical & Experimental Perspectives

Contribution ID: 71

Type: **not specified**

Searches for Nonstandard Neutrino Oscillations at Nuclear Reactors

Friday 11 February 2022 11:45 (15 minutes)

Nuclear reactors have been workhorses for neutrino physics since its inception, and have been critical in establishing neutrino oscillations. While the three-oscillating-neutrino paradigm has been remarkably successful, long-standing anomalies at LSND, MiniBooNE, gallium experiments and reactor experiments may be pointing to the existence of new physics that can affect this phenomenon. In this talk, I will discuss how reactor experiments have contributed to this enterprise, particularly over the past decade. Moreover, I will outline the prospects for near-future endeavors in searching for nonstandard oscillation effects, emphasizing their role in the global neutrino physics program.

Author: BERRYMAN, Jeffrey (University of California, Berkeley)

Presenter: BERRYMAN, Jeffrey (University of California, Berkeley)

Session Classification: Parallel Session 3: Reactors and More