

Robert Wilson, DUNE Institutional Board Chair
Mark Thomson, Edward Blucher, DUNE Collaboration Co-spokespersons

July 21st, 2017

Dear colleagues:

The University of Florida would like to join the DUNE collaboration. I am submitting this letter to the DUNE Institutional Board in accordance with paragraph 2.2 of the "Governance of the DUNE Collaboration".

List of persons wishing to join:

Associate Professor Ivan Furic (Tenured)

Institutional Representative:

Ivan Furic will serve as institutional representative for the University of Florida

Scientific and Technical Interests of the Group:

The group's scientific interests are searches for sterile neutrinos, CP violation in the neutrino sector, and supernova detection. Previous physics experience is currently from Tevatron (CDF) and LHC (CMS) physics, covering a range from B-meson oscillations and CP violation studies, through measuring the cosmic-ray charge ratio with the CMS detector, to Higgs \rightarrow bb and $Z' \rightarrow \mu\mu$ searches.

The group's technical interests are with DUNE cold electronics and computing. The group's technical experience is mostly with digital electronics research and design, commissioning and upgrading, in the context of the CMS Endcap Muon trigger and prior to that, the CDF Silicon Tracker Vertex Trigger (SVT).

Resources that the group is willing to devote to DUNE:

The Liquid Argon TPC effort at UF is being developed with DUNE as its long-term focus.

A proposal to start this research at UF was submitted to DOE in Fall 2016 and has received partial funding. With this initial funding, a postdoc will be hired with a time distribution of 0.5 FTE on DUNE and 0.5 FTE on an SBN experiment. The institutional representative will spend most of their research time on DUNE. Graduate students hired to the project will spend some of their PhD research time contributing to DUNE hardware efforts.

Potential sources for funding:

The effort to start a Liquid Argon TPC group at UF has been proposed to the US Department of Energy in Fall 2016 (DOE-FOA-0001604, proposal #0000227005). The proposal was granted partial funding to hire a postdoc for a year in Summer 2017. Should UF be accepted as a member of the DUNE collaboration, a follow-up proposal will be submitted to the Fall 2017 DOE FOA.

Yours sincerely,

Ivan Furic

Cc:

Kevin Ingersent, UF Physics Department Chair
Guenakh Mitselmakher, UF Institute for High Energy Physics and Astrophysics Director
Heather Ray, UF Principal Investigator, DOE Intensity Frontier