

Dear All,

As Snowmass co-conveners of the topical groups NF06, TF05, TF11, and RF04, we are organizing a three-day workshop together with USQCD, to be held remotely August 23–25 from 11 am to 2 pm ET each day. The main purpose of this workshop is to collect inputs from the community and facilitate the writing of the white paper “**Theoretical tools for neutrino scattering: the interplay between lattice QCD, EFTs, nuclear physics, phenomenology, and neutrino event generators.**”

The workshop will have 6 sessions devoted to the following topics:

- LQCD calculations for neutrino-nucleus scattering (Coordinator: **Mike Wagman**)
- Ab initio nuclear many-body studies for neutrino-nucleus scattering (Coordinator: **Joe Carlson**)
- Coherent elastic neutrino-nucleus scattering (Coordinator: **Louis Strigari**)
- Neutrino-induced shallow and deep inelastic scattering (Coordinator: **Natalie Jachowicz**)
- The needs of the neutrino experimental program (Coordinator: **Kendall Mahn**)
- Neutrino event generators (Coordinator: **Steven Gardiner**)

In each session, there will be two talks (~20 minutes each) overviewing the current status and vision for the next ten years and assessing the capabilities required for progress, followed by a discussion (~40 minutes) where the community is invited to provide their inputs.

At the end of the last day, there will be six parallel sessions devoted to writing the community’s inputs. These working groups will be coordinated by the coordinators indicated above.

We welcome your participation in the discussion, which will be reflected in the white paper. If you cannot attend, please fill out [this google form](#) with any comments or additions. The form will remain open after the workshop. Below please find the workshop’s schedule.

Please register to the workshop through [this indico page](#) and we will send you a zoom link as we get closer to the date.

We hope to see you at the workshop!

Sincerely,

Snowmass NF06, TF05, TF11, and RF04 Organizers

A. Baha Balantekin, Vincenzo Cirigliano, Zohreh Davoudi, Andre L. De Gouvea, Steven Gardiner, Rajan Gupta, Andreas S. Kronfeld, Kendall Mahn, Irina Mocioiu, Saori Pastore, Louis Strigari

EDT	Day 1 AUGUST 23	Day 2 August 24	Day 3 August 25
	LQCD calculations for neutrino-nucleus scattering (Coordinator: Mike Wagman)	Coherent elastic neutrino-nucleus scattering (Coordinator: Louis Strigari)	The needs of the neutrino experimental program (Coordinator: Kendall Mahan)
Talk 1 (20') 11:00	Aaron Meyer	Phil Barbeau	Kendall Mahn
Talk 2 (20') 11:20	Phiala Shanahan	Diego Aristizabal	Artur Ankowski
Discussion 1 (40')			
Break (20') 12:20			
	Ab initio nuclear many-body studies for neutrino-nucleus scattering (Coordinator: Joe Carlson)	Neutrino-induced shallow and deep inelastic scattering (Coordinator: Natalie Jachowicz)	Neutrino event generators (Coordinator: Steven Gardiner)
Talk 3 (20') 12:40	Rocco Schiavilla	Sajjad Athar	Steven Gardiner
Talk 4 (20') 1:00	Sonia Bacca/Bijaya Acharya	Jorge Morfin	Neutrino event generator: Panell (40')
Discussion 2 (40')			Parallel sessions/working groups (60')