Roadmap for the international, accelerator-based neutrino programme; discussion document

H Tanaka
University of Toronto, Canada

The purpose of this presentation is to draw the attention of the delegates to Neutrino 2016 to the "Roadmap for the international, accelerator-based neutrino programme; discussion document" that has been prepared by the ICFA Neutrino Panel.

The document summarises the global accelerator-based neutrino landscape with explicit indication of the objectives and milestones of experiments presently in operation or under construction, the milestones for experiments being considered for approval, and the proponent’s timetable for future experiments that are not yet being considered formally. Based on this information, the evolution of the precision with which the critical parameters governing the neutrino are known was evaluated to identify branch or decision points at which the future direction of the sterile-neutrino search and neutrino-nucleus cross section measurement programmes should be defined in order to maximise the integrated scientific output of the accelerator-based neutrino programme. The branch points have also been used to identify the timeline for the R&D required to take the programme beyond the horizon of the next generation of experiments. The theory and phenomenology programme, including nuclear theory, required to ensure that maximum benefit is derived from the experimental programme is also discussed.

The intention of the Panel is that the interim conclusions and draft recommendations presented in the roadmap discussion document will be used as the basis for discussion amongst the neutrino community and with the stakeholders in the programme. The Panel’s objective is to solicit feedback that will be taken into account as the document is finalised in time for it to be presented to the February 2017 meeting of ICFA.