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## Novel measurement of tau-neutrino production by DsTau at the CERN SPS

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The tau-neutrino CC cross section has never been well measured. There has only been one measurement, by the DONuT experiment, with a systematic uncertainty larger than 50%, mainly due to uncertainties in the Ds differential production cross section in high energy proton interaction. The DsTau collaboration proposes to study tau-neutrino production and the energy distribution by analyzing Ds  $\rightarrow$  tau events in 400 GeV proton interactions. By employing state-of-the-art emulsion particle detector technologies, we will analyze  $10^8$  proton interactions and detect the double kink topology of Ds  $\rightarrow$  tau  $\rightarrow$  X decays. Using this new measurement, we will re-evaluate the tau-neutrino cross section with the data from DONuT and test lepton universality in neutrino CC interactions. Furthermore, it will provide useful data for future tau-neutrino experiments. In this talk, we report an overview of the experiment and the planned prototype test in 2016.

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