## The 24th International Workshop on Neutrinos From Accelerators (NuFact 2023)

Contribution ID: 7 Type: Oral

## **MK Single Pion Production**

Tuesday 22 August 2023 14:00 (15 minutes)

I would like to present my recent work at the NuFact workshop in Seoul. https://journals.aps.org/prc/abstract/10.1103/PhysRevC.107.02550

I have developed a single pion production model in neutrino-nucleon interaction:

https://inspirehep.net/literature/1634864.

Then I used electron scattering data to extract the nucleon form factors:

https://inspirehep.net/literature/1802724,

In the recent paper, I extended the model to the transition region between resonance and Deep Inelastic regions (high momentum transfer, Q^2, and hadron invariant mass, W) which is extremely important for neutrino oscillation experiments such as DUNE.

Primary author: Dr KABIRNEZHAD, Minoo (Imperial College London)

Presenter: Dr KABIRNEZHAD, Minoo (Imperial College London)

Session Classification: parallel (room#102)

Track Classification: WG2: Neutrino Scattering Physics