Qiyu Yan 严启宇

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Education

University of Warwick	2023/06 - 2024/05
Visiting Ph.D. Student	Coventry, UK
University of Chinese Academy of Sciences	Since 2021/09
Supervisor: Prof. Xianguo Lu (Warwick), Prof. Yangheng Zheng	Derjing, China
University of Chinese Academy of Sciences	2017/00 2021/04
B Sc. in Physics	$\frac{2017/09 - 2021/06}{\text{Beijing China}}$
• Core Course GPA: 3.88/4.0	Deijing, enina
Projects	
PROFESSOR2-Based ReWeight for GENIE	2023 – Present
Supervisor: Prof. Xianguo Lu, Prof. Constantinos Andreopoulos	
The Ghent Hybrid Model in NuWro	2023 - 2024
Supervisor: Prof. Xianguo Lu	
B.Sc. Thesis: Physics Sensitivity Study with GeV Neutrinos in JUNO	2020 - 2021
Supervisor: Dr. Xianguo Lu (Oxford), Prof. Yangheng ZhengUse Honda flux and GENIE generator to predict the event rate and final state part	icles of atmospheric neutrino
interactions in JUNO detector.	
 Use PROB3 to calculate the oscillation probability for different oscillation parameters. Use GEANT4 to simulate the propagation of final state particles in JUNO detector. 	eters. or, to estimate the energy res-
olution.	the of HINO to monthing manage
• Ose estimated energy resolution and angular resolution to calculate the sensitive ordering problem.	ity of JUNO to neutrino mass
Summer Project: GEANT4 Based Simulation of Time Projection Chamber	2020/07 - 2020/09
 Use GEANT4 to simulate the behavior of different particles going through a TPO deposit dE/dx and track length 	C detector, record the energy
 Observed different Bragg peak behavior from different particles, which may be tification in TPC detector. 	used to conduct particle iden-
• Observed the dependence on the energy deposit of track length, which may be	used to conduct energy mea-
surement in TPC detector.	
Collaborations and Roles	
GENIE Collaboration	2023 – Present
Develop new ReWeight tool.	2024 D
• JUNO Collaboration	2021 – Present
 GAN INLEE FWG: WOR ON GeV generator integration to JUNO software and i trino interaction models with JUNO. 	incorporating up-to-date neu-
 NuWro Task Lead 	2023 – Present
GENIE Task Lead	2023 – Present
 Development of quality control tools for Monte Carlo sample 	

Conferences

Poster: Jie Cheng, Zhenning Qu, Kaile Wen, Qiyu Yan and Xianguo Lu, Status of the GANYMEDE Working Group
for GeV Physics at JUNO, NEUTRINO2022.Seoul Korea (online) 2022/06

Publications

Qiyu Yan, Kajetan Niewczas, Alexis Nikolakopoulos, Raúl González-Jiménez, Natalie Jachowicz, Xianguo Lu, Jan Sobczyk, Yangheng Zheng, *The Ghent Hybrid Model in NuWRO: a new neutrino single-pion production model in the GeV regime*, <u>arXiv: 2405.05212 [hep-ph]</u> Submitted to JHEP