

Yong Kwon

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Bachelor of Science
PKNU, Busan, Republic of Korea

Research interests

Statistical physics, quantum information, quantum computing, open quantum system

Education

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| 2022 – Present | Pukyong National University – Busan
M.S. in physics
Mentors: Prof. Seung Ki Baek |
| 2016 – 2022 | Pukyong National University – Busan
B.S. in physics
Mentors: Prof. Seung Ki Baek, Prof. Jaegon Um |

Publications

2022 *TBA*

Research experience

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|----------------|---|
| 2021 – Present | Entanglement vs mutual information on two qubit system
Mentors: Prof. Jaegon Um (POSTECH), Prof. Seung Ki Baek (PKNU) <ul style="list-style-type: none">• Investigate on two spin-1/2 particles• Find correlated information entropy on classical definition and quantum definition• Compare two entropy values using ‘Concurrence’ |
| Fall 2020 | Quantum-like game development
Mentors: Prof. Jae-yeol Hwang (PKNU) (only for class guidance) <ul style="list-style-type: none">• The word ‘Quantum-like game’ means a game made by applying the phenomenon to introduce to those who are not familiar with quantum physics.• This project worked during the one of undergraduate classes, ‘Capstone Design I’• My contributions: project idea suggestion, introducing concept of quantum-like games, GUI development• Find more detailed information following Github team repository. |

Talks and posters

2021. 10. **[P]** Correlation between mutual information and concurrence
 KPS Fall Meeting 2021
2021. 08. **[P]** Entanglement vs. mutual information
 Roles of heterogeneity in non-equilibrium collective dynamics (RHINO) 2021 [link](#)

Technical skills

Programming languages

Python, C (a little bit), \LaTeX , Markdown

Software

\LaTeX , Git, Mathematica, Linux (usually Ubuntu)

Languages

Korean (mother language), English (intermediate level)

Activities

2022. 01. **The 19th KIAS-APCTP winter school on statistical physics**
2017. 07. **PKNU-ISS (International Summer School) Program**
- Officially certified program by PKNU
 - Attended seasonal classes with abroad students who were enrolled to my university
 - To this program, my english skill has improved and felt their cultural difference
- Traveling abroad experiences**
- Vietnam (2016) , Taiwan (2016) , Japan (2018) and Italy (2020)