Name	Yu, Su-Peng	**Nationality**	Taiwan, ROC	
Phone Number	886-2-23222701	**E-Mail**	Yuadam.prime @gmail.com	
Date of Birth	01/31/1988	**Military Obligation**	Being preformed 08/2010 to 07/2011	
Contact Address	9F-1, No.49, Sec. 1, Nanchang Rd., Taipei, Taiwan (R.O.C.), 10074	**Marital Status**	Single	

Educational Status

Institution	Duration
Taipei Municipal Hong-Dao Junior High School	09/00~06/03
Taipei Municipal Jian-Guo High School – Class for the Science Gifted	09/03~06/06
National Taiwan University – Bachelor - Major in physics	09/06~06/10

Language Proficiency

Chinese (Mandarin)	Fluent	**Examinations**	Name	Date	Score
			GRE General	10/24/09	610/800/4.5
English	Fluent		GRE Subject - Physics	11/07/09	990
German	Basic		TOEFL IBT	05/22/10	114

Awards and Honors

Awarded the International Fulbright Science and Technology Award for 2011
Awarded Dean's Award of Academic Excellence on graduation from NTU
Five times awarded for Academic Excellence from NTU (Award given to the top 5% of each class)
Participated in 37th International Physics Olympiad, Singapore, Silver Medal awarded.
Participated in 7th Asian Physics Olympiad, Kazakhstan, Gold Medal awarded.

Publications

Determining the size distribution of magnetic nanoparticles based on analysis of magnetization curve, Journal of Applied Physics. **106**, 103905 (2009)

Experiences with Projects

- *Determining the size distribution of magnetic nanoparticles* – Experimental Topical Research
- *Quantum open systems and MRFM single-spin measurement* – Theoretical Topical Research
- *Direct simulation of Maxwell distribution in ideal gas via collisions* – Term project of Computer Programming course

Experiences with Projects (Continued)	- *Second law of thermodynamics in classical open systems* – Term project of Statistical Physics (II) course - *Applications of semiclassical models with wave-packet picture* – Term project of Theory of Solid (I) course - *Properties and Applications of Coherent State* – Term project of Mathematical Structure of Quantum Mechanics course - *Principle and applications of spintronics* – Term project of Introduction to Nano-electronics course
Research Skills	Analytical Skills: - Quantum physics with both Schrődinger and Heisenberg formalism. - Proficiency with density matrix quantum statistics formalism, Heisenberg equation with coupled environment and feedback, and quantum trajectory formalism. - Familiarity with thermodynamic ensembles, Fermi-Dirac and Bose-Einstein statistics. - Familiarity with complex analysis, probability and statistics, ODE/PDE solving, Fourier/Laplace transforms, and perturbation approximation methods. - Capability of rigorous theorem proving Experimental Skills: - Vacuum chamber operation, substrate preparation, deposition, annealing. - Nanoparticle handling, polymer matrix synthesis - Experience with atomic force microscopy and vibration sample magnetometer - Basic electronics, filter/amplifier/logic circuit building Computational Skills: - Proficiency with C++, Matlab, and Mathematica - Numerical DE solving, simulation and data analysis - Visualization, parallel usage and mutual-aiding between derivation and computation

Research Interests	Quantum Physics, Quantum Open System, and Measurements: - Decoherence-free subspaces - Rapid and continuous measurements - QND measurements - Collapse-less picture of measurements - Feedback protection of non-classical states - Measurement noise cancelation - Feedback-amplification of small signals - Systems with non-classical steady states Quantum Phenomena in Nano-Technology: - Novel properties of nano-structures - Nano-electronics - Quantum transistors - SQUID and cQED devices - MEMS/NEMS
Miscellaneous	Learned German at Deutsches Kulturzentrum Taipei for one year Participated in 1st APEC Youth Leadership Camp For the Science Gifted Traveled countries: Canada, China, India, Japan, Kazakhstan, Singapore ,South Korea, USA, UK