

Curriculum Vitae

Young Lee, Ph D, D.Min

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ACADEMIC PREPARATION:

Post Doctoral Medical Physics Training, MD Anderson Cancer Center, 2007 to 2010

Concentrations: Radiation Physics, Radiation Detection, Radiation Oncology,
Diagnostic Image, Radiation Biology, Nuclear Medicine, Anatomy
and Physiological Oncology, Proton Therapy

Advisor: Dr. George Starkschall

Ph.D. in Physics, University of Houston, Houston, 2005

Concentrations: String theory, Mathematical Physics, Statistical Mechanics
Non-Linear Dynamics and Chaos, Graph Theory

Dissertation: *Minimum Uncertainty Wavelets in SUSY Quantum Mechanics, the
Theory of Coherent States, the Theory of Strings, and the Fermionic Harmonic
Oscillator*

Advisor: Dr. Donald Kouri

D.Min. in Theology, Houston Graduate School of Theology, Houston, 2001

Concentrations: Spiritual Leadership, Biblical Language

Dissertation: *An Approach to the Paradigms of Spiritual leadership for Creative
and Effective Ministry*

Advisor: Dr. Charles Pitts

M.S. in Physics, Yonsei University, South Korea, Seoul, 1981

Concentrations: Mathematical Physics, Complex Analysis, Real Analysis

Thesis: *2+1 dimensional Yang-Mill theory*

Advisor: Dr. J. H. Yee

B.S. in Physics, Yonsei University, South Korea, Seoul, 1975

Concentrations: Physics, Mathematics

COMPUTATION SKILLS:

- Problem solving and quantitative analysis skill in Theoretical Physics
- Computation of standard numerical techniques such as Monte Carlo simulations
- Substantial experience in UNIX and Windows operating system
- Programming experience in C/C++ including parallel programming with MPI
- Graphical and numerical calculation using Matlab, Mathematica, and Maple
- Geant4, Monte-Carlo Simulation

NATIONALITY:

- US Citizen

LANGUAGES:

- Fluent in English and Korean
- Can read Hebrew, Greek, Spanish, French, German, Japanese, and Chinese

PROFESSIONAL EXPERIENCE:

Adjunct Professor, Sep, 2010-present

Department of Physics, Texas Southern University

Physics Lab Director, Jan, 2014- present

Department of Physics, Texas Southern University

Adjunct Professor, Aug, 2011-Jul, 2013

Department of Natural Science, University of Houston, Downtown

Visiting Assistant Professor, Jan, 2007-Aug, 2010

Department of Physics, Texas Southern University

Adjunct Professor, Aug, 2006-Dec, 2006

Department of Natural Science, University of Houston, Downtown

Research Assistant Professor, Jan, 2006- Dec, 2006

Assisted Dr. Donald Kouri, Department of Physics, University of Houston

Research Assistant, Jan, 2003-Dec, 2005

Assisted Dr. Donald Kouri, Department of Physics, University of Houston

Research Assistant, Jan, 2002-Jan, 2003

Assisted Dr. Kevin Bassler, Department of Physics, University of Houston

Teaching Assistant, Aug, 2001-May, 2005

Faculty in Physics, Department of Physics, University of Houston

COURSES TAUGHT at Texas Southern University (2007-2015)

Physical Science (Physics, Chemistry, Geology, Meteorology, Astronomy)

College Physics I & II

University Physics I, II, & III

General Physics for Life Science
Physics for Engineers I & II
College Physics Lab I & II
University Physics Lab I, II, & III
Modern Physics
Electromagnetism
Thermodynamics and Statistical Physics

COURSES TAUGHT at University of Houston, Downtown (2006-2007, 2011-2013)

Physical Science (Conceptual)
General Physics I & II
College Physics Lab I

COURSES TAUGHT at University of Houston (2001-2005)

General Physics Laboratory I
General Physics Laboratory II

PUBLICATIONS:

Jonathan L Jerke, Young Lee, C J Tymczak (2015), *A novel Gaussian-Sinc mixed basis set for electronic structure calculations*, **The Journal of Chemical Physics**; 143(6):064108. DOI:10.1063/1.4928577

Y. Lee, D.J. Kouri, and D. K. Hoffman (2010), *Minimum Uncertainty Wavelets in Non-Relativistic Super-Symmetric Quantum Mechanics*, **Journal of Mathematical Chemistry**, Vol. 49:12-34, Nr. 1, ISSN 0259-9791.

K.E. Bassler, C. Lee, and Y. Lee (2004), *Evolution of Developmental Canalization in Networks of Competing Boolean Nodes*. **Physical Review Letters**, vol. 93, 038101.

PAPERS PRESENTED AT CONFERENCES:

Evolution in Competing Boolean Nodes. Presented at CNLS Annual Conference 2003 on Networks: Structure, Dynamics and Function, Santa Fe, NM, 2003

CURRENT RESEARCH INTERESTS:

- Fractional Calculus
- Fermionic Quantum Physics
- Fractional Statistical Mechanics
- SUSY Mu-wavelet theory in Quantum Fields and String theory
- Foundation of Quantum Mechanics
- Quantum Field Theory and Superstring Theory
- Complexity Theory and Non-equilibrium Statistical Mechanics
- Econophysics
- Radiation Physics
- Computer Simulation

REFERENCES:

Donald Kouri, Professor
Department of Chemistry, Physics & Mathematics
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Charles A. Pitts, Associate Professor
Houston Graduate School of Theology
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