

Park, Chan Youn

Objective

A position with emphasis on utilizing scientific, mathematical, and computational ideas and analyses to meet contemporary challenges.

Experience

Please see <https://chan-y-park.github.io/blog/tag/experiences> for more detail.

Sep. 2014 ~ present Rutgers University Piscataway, NJ, USA

Postdoctoral Fellow at New High Energy Theory Center

- Numerical and analytic studies of theoretical & mathematical physics.
- [loom](#): an application with web frontend, GUI, and multiprocessing to study supersymmetric gauge theories.
 - GitHub link: <https://github.com/chan-y-park/loom>
 - 2016 SciPy talk: https://chan-y-park.github.io/blog/scipy_2016_talk.html

Oct. 2004 ~ Dec. 2005 PSIA Corp. (Now Park Systems Corp.) Gyeonggi-do, Korea

System Programmer

Please see https://chan-y-park.github.io/blog/atomic_force_microscope.html for more detail.

- Development of an embedded operating system for an atomic force microscope (AFM) electronic controllers based on *Motorola* Sandpoint reference platform.
 - Customized the kernel and the device drivers of *NetBSD*, a branch of BSD Unix.
- Development of a prototype force constant calibration module of AFM cantilevers
 - Studied thermal fluctuation calibration using *National Instruments* data acquisition.
 - Collaborated with *National Physical Laboratory, UK* on standard spring calibration method.

Oct. 2003 ~ Oct. 2004 Softwise Inc. Seoul, Korea

Web & System Programmer

Please see https://chan-y-park.github.io/blog/query_recommendation.html for more detail.

- Development of a web search engine query recommendation system using query logs
 - Applied to *NATE.com*, one of the 3 largest commercial web portals in Korea.
- Development of the administrator interface of *Yahoo!* Korea database search system.

Education

Oct. 2007 ~ Jun. 2014 California Institute of Technology Pasadena, CA, USA

Ph.D. in Physics

- Research Topic: theoretical physics (supersymmetric gauge theories and string theory)
 - Developed *Mathematica* programs for two projects of theoretical physics.

Mar. 2001 ~ Aug. 2007 Seoul National University Seoul, Korea

B.S. in Physics, Minor in Mathematics

- Summa cum laude & ranked 1st in the department.

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List of Publications

All of the following are co-first author papers and the authors are listed in alphabetical order.

- P. Longhi, C. Y. Park, *ADE Spectral Networks and Decoupling Limits of Surface Defects*, *JHEP* **02** (2017) 011 [[arXiv:1611.09409](#)]
- P. Longhi, C. Y. Park, *ADE Spectral Networks*, *JHEP* **08** (2016) 087 [[arXiv:1601.02633](#)]
- C. Y. Park, *2d SCFT from M-branes and its spectral network*, Proceedings of String-Math 2013, *Proceedings of Symposia in Pure Mathematics* [[arxiv:1401.2207](#)]
- K. Maruyoshi, C. Y. Park, W. Yan, BPS spectrum of Argyres-Douglas theory via spectral network, *JHEP* **12** (2013) 092 [[arXiv:1309.3050](#)]
- K. Hori, C. Y. Park, Y. Tachikawa, *2d SCFTs from M2-branes*, *JHEP* **11**(2013)147 [[arXiv:1309.3036](#)]
- C. Y. Park, *Ramification Points of Seiberg-Witten Curves*, *JHEP* **07** (2011) 068 [[arXiv:1102.0288](#)]

Selected List of Invited Talks

For the full list of invited talks, please see <http://chan.physics.rutgers.edu/html/talks.php>.

- Jul. 2016, *A String Theorist's Journey with Python*, SciPy 2016, US
- Apr. 2016, *Supersymmetric Spectroscopy with Spectral Network*, Perimeter Institute
- Mar. 2016, *Supersymmetric Spectroscopy with Spectral Network*, Imperial College London
- Nov. 2014, *BPS spectra of supersymmetric theories*, University of Texas at Austin
- Jun. 2013, *2d SCFT from M2-branes*, String-Math Conference 2013, US
- Aug. 2011, *Origami of a Gaiotto Curve from a Seiberg-Witten Curve*, McGill University

Scholarships and Awards

- Samsung Scholarship (2007 ~ 2012)
- Academic Excellence Scholarship, Seoul National University (2001~2007)
- GE Scholarship, General Electric Foundation (2003 ~ 2007)
- Korea Foundation for Advanced Studies (KFAS) Scholarship (2002 ~ 2007)
- Silver Medal in the 31st International Physics Olympiad (2000)

Skills from Professional Experiences

- Operating Systems
 - Linux & Unix (NetBSD) kernel & device driver programming.
 - Linux web/database server administration & application development.
 - Windows server service application development.
 - Multithreading/multiprocessing programming.
- Programming Languages
 - Python, C, C++, PHP.
- Database
 - MySQL, MS-SQL.
- National Instruments Labview & Measurement Studio.
- Mathematica, SageMath.