CURRICULUM VITAE

Kechen Wang (王科臣)

Center for Future High Energy Physics
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EDUCATION:

Ph. D. in Physics August 2014

Texas A&M University, College Station, Texas, US

Dissertation: *Searching for Top Squarks at the Large Hadron Collider*

Advisor: *Bhaskar Dutta*

M. S. in Physics July 2011

Texas A&M University, College Station, Texas, US

Thesis: *Supersymmetry Signals of Mirage Mediation Model at the Large Hadron Collider*

Advisor: *Bhaskar Dutta*

B. S. in Physics June 2008

Nankai University, Tianjin, China

Advisor: *Ping-zhi Ning & Lei Li*

PROFESSIONAL POSITION:

Postdoctoral Research Associate September 2014 - present

Center for Future High Energy Physics, Institute of High Energy Physics, Beijing, China

Advisor: Cai-dian Lv

RESEARCH INTERESTS:

Collider phenomenology and model building of Beyond Standard Model physics:

Supersymmetry, Higgs physics, and dark matter, etc.;

Intersection of high energy physics, cosmology and astrophysics.

PUBLICATIONS:

1. The CEPC-SPPC Study Group, "*Probing CEPC-SPPC Preliminary Conceptual Design Report Volume I – Physics & Detector"*, published on line [http://cepc.ihep.ac.cn/preCDR/volume.html].

2. P. Padley, K. Sinha, and **K. Wang**, "*Natural Supersymmetry, Muon g-2, and the Last Crevices for the Top Squark*", (submitting to Phys. Rev. D) [hep-ph/1505.05877].

3. B.Dutta, T. Ghosh, A. Gurrola, W. Johns, T. Kamon, P. Sheldon, K. Sinha, **K. Wang** and S. Wu, "*Probing Compressed Sleptons at the LHC Using Vector Boson Fusion Processes*", Phys. Rev. D **91** (2015) 055025 [hep-ph/1411.6043].

4. B.Dutta, W. Flanagan, A. Gurrola, W. Johns, T. Kamon, P. Sheldon, K. Sinha, **K. Wang** and S. Wu, "*Probing Compressed Top Squark Scenarios at the LHC at 14 TeV*", Phys. Rev. D **90** (2014) 095022 [hep-ph/1312.1348].

5. A. G. Delannoy, B. Dutta, A. Gurrola, W. Johns, T. Kamon, E. Luiggi, A. Melo, P. Sheldon, K. Sinha, **K. Wang** and S. Wu, "*Probing Supersymmetric Dark Matter and the Electroweak Sector using Vector Boson Fusion Processes: A Snowmass Whitepaper*", [hep-ph/1308.0355].

6. A. G. Delannoy, B. Dutta, A. Gurrola, W. Johns, T. Kamon, E. Luiggi, A. Melo, P. Sheldon, K. Sinha, **K. Wang** and S. Wu, "*Probing Dark Matter at the LHC using Vector Boson Fusion Processes*", Phys. Rev. Lett. **111** (2013) 061801 [hep-ph/1304.7779].

7. B. Dutta, T. Kamon, N. Kolev, K. Sinha, **K. Wang** and S. Wu, "*Top Squark Searches Using Dilepton Invariant Mass Distributions and Bino-Higgsino Dark Matter at the LHC*", Phys. Rev. D**87** (2013) 095007 [hep-ph/1302.3231].

8. B. Dutta, T. Kamon, N. Kolev, K. Sinha, and **K. Wang**, "*Searching for Top Squarks at the LHC in Fully Hadronic Final State*", Phys.Rev. D**86** (2012) 075004 [hep-ph/1207.1873].

9. B. Dutta, T. Kamon, A. Krislock, K. Sinha and **K. Wang**, "*Diagnosis of Supersymmetry Breaking Mediation Schemes by Mass Reconstruction at the LHC*", Phys. Rev. D**85** (2012) 115007 [hep-ph/1112.3966].

TALKS:

IAS Program on the Future of High Energy Physics, HKUST, Hong Kong, China

"*Searching for SUSY particles at the LHC Using VBF Topology*" January 2015

116th Annual Meeting of the Texas Academy of Science, Schreiner U, Texas, US

"*Searching for Top Squarks at the LHC in Fully Hadronic Final State*" March 2013

Phenomenology 2013 Symposium, U of Pittsburgh, Pittsburgh, Pennsylvania, US

"*Top Squark Searches and Bino-Higgsino Dark Matter at the LHC*" May 2013

SCHOLARSHIP:

Chinese Government Scholarship March 2015

ATTENDED SUMMER SCHOOLS AND WORKSHOPS

Higgs / Z Factory Workshop, ITP, Beijing, China March 2015

Flavor and Top Physics @ 100 TeV Workshop, IHEP, Beijing, China March 2015

2nd CFHEP Symposium on Circular Collider Physics, IHEP, Beijing, China August 2014

TASI 2013, "Particle Physics: The Higgs Boson and Beyond", UC, Boulder, US June 2013

TAMU Workshop on Dark Matter, TAMU, College Station, TX, US March 2013

Strings 2010 Conference, TAMU, College Station, TX, US March 2010

TEACHING:

Undergraduate course "Mechanics", U of Chinese Academy of Sciences, China Fall 2015

Assistant for graduate course "Particle Physics and Cosmology", TAMU, US Fall 2013

Undergraduate course "College Physics", TAMU, US 2009-2010

Undergraduate course "Mechanics", TAMU, US 2008-2009

PROFESSIONAL SOCIETIES

Member, Texas Academy of Science 2013-present