

Academic Staff Resume

Assistant Professor ZHANG, Xiao Ping

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Academic Qualification:

Ph.D. in Physics (Nuclear Physics), Nanjing University, China, 2010

Bachelor in Physics (Microelectronics), Nanjing University, China, 2004

Teaching Area

University Physics

University Physics Experiment

Instructor of MUST Great Masters' Seminars

Research Area

X-ray remote sensing and planetary exploration

Lunar dust and planetary surface environment

Nuclear astrophysics and relativistic heavy ion collisions

Working Experience

Sep. 2012 to present: Assistant Professor, Space Science Institute, MUST

Jul. 2010 to Aug. 2012: Post-doc Fellow, Department of Engineering Physics, Tsinghua University, China

Jan. 2011 to Jun. 2011: Visiting Scholar, Department of Physics and Astronomy, University of California, Los Angeles

Mar. 2008 to Apr. 2010: Student Assistant, Nuclear Science Division, Lawrence Berkeley National

Academic Publication

Journal Articles (selected, total 60+ SCI papers):

1. **Xiaoping Zhang** (for the STAR Collaboration), "Beam energy dependence of strange hadron production from STAR at RHIC", Nuclear Physics A 904, 543c (2013).
2. L. Adamczyk et al. (STAR Collaboration) (I am one of the principal authors), "Observation of an energy-dependent difference in elliptic flow between particles and antiparticles in relativistic heavy ion collisions". Physical Review Letters 110, 142301 (2013).
3. H. Agakishiev et al. (STAR Collaboration), "Observation of the antimatter helium-4 nucleus". Nature 475, 412 (2011).
4. **Xiaoping Zhang**, Jinhui Chen, Zhongzhou Ren, N. Xu, Zhangbu Xu, Qiang Zheng, and Xianglei Zhu, "Effect of final state interactions on particle production in d + Au collisions at energies available at the BNL Relativistic Heavy Ion Collider". Physical Review C 84, 031901(R) (2011).
5. B. I. Abelev et al. (STAR Collaboration), "Observation of an antimatter hypernucleus". Science 328, 58 (2010).
6. **Xiaoping Zhang**, Zhongzhou Ren, Qijun Zhi, and Qiang Zheng, "Systematics of β^- -decay half-lives of nuclei far from β -stable line", Journal of Physics G: Nuclear and Particle Physics 34, 2611 (2007).
7. **Xiaoping Zhang** and Zhongzhou Ren, "New exponential law of β^+ -decay half-lives of nuclei far from β -stable line", Physical Review C 73, 014305 (2006).

8. **Xiaoping Zhang** and Zhongzhou Ren, " α -decay half-lives of ground and isomeric states calculated in a unified theoretical framework", Journal of Physics G: Nuclear and Particle Physics 31, 959 (2005).

Conference Papers (selected):

1. **Xiaoping Zhang**, Minggang Xie, Meng-Hua Zhu, Wudong Dong, Zesheng Tang, Aoao Xu, "Major elements abundances in Chang'E-3 landing site from Active Particle-induced X-ray Spectrometer", International Symposium on Lunar and Planetary Science, Macau (2014).
2. Wudong Dong, **Xiaoping Zhang**, Meng-Hua Zhu, Aoao Xu, Zesheng Tang, "Distributions of Mg/Si and Al/Si on the lunar surface derived from Chang'E-2 X-ray Spectrometer", International Symposium on Lunar and Planetary Science, Macau (2014).
3. **Xiaoping Zhang**, Wudong Dong, Meng-Hua Zhu, Aoao Xu, "Lunar X-ray Fluorescence Observations from Chang'E-2 X-ray Spectrometer", First Beijing International Forum on Lunar and Deep-space Exploration, Beijing (2013).
4. **Xiaoping Zhang** for the STAR Collaboration, "Beam energy dependence of strange hadron production from STAR at RHIC", Quark Matter 2012, Washington DC, USA (2012).
5. **Xiaoping Zhang** for the STAR Collaboration, "Probe the partonic/hadronic matter with elliptic flow in STAR Beam Energy Scan", 28th Winter Workshop on Nuclear Dynamics, Dorado del Mar, Puerto Rico,
6. **Xiaoping Zhang** for the STAR Collaboration, "Probing QCD phase diagram with ϕ meson production in STAR BES program", Strangeness in Quark Matter 2011, Krakow, Poland (2011).
7. **Xiaoping Zhang** for the STAR Collaboration, " ϕ meson production and cold nuclear matter effect in d + Au collisions at $\sqrt{s} = 200$ GeV", CIPANP 2009: 10th Conference on the Intersections of Particle and Nuclear Physics, San Diego, CA, USA, 2009.

Research Projects

1. Theoretical studies on production rate of cosmogenic nuclei in lunar surface, meteorites, and the earth's atmosphere, supported by the Science and Technology Development Fund (FDCT) of Macau (2012-2014)
2. Probing QCD phase diagram with ϕ meson production in STAR beam energy scan program, supported by National Natural Science Foundation of China (2011-2014)
3. Analysis of strange hadron production in STAR beam energy scan program, supported by Chinese Postdoctoral Science Foundation (first class) (2010-2012)
4. Probing QCD phase diagram with ϕ meson production in STAR beam energy scan program, supported by the Fundamental Science Research Foundation from Department of Engineering Physics, Tsinghua University (2010-2012)

Professional Certification and Awards

Professional Society Membership

1. Member of Chang'E-3 Scientific Data Research and Application Core Team
2. Member of STAR Collaboration at RHIC (Relativistic Heavy Ion Collider)