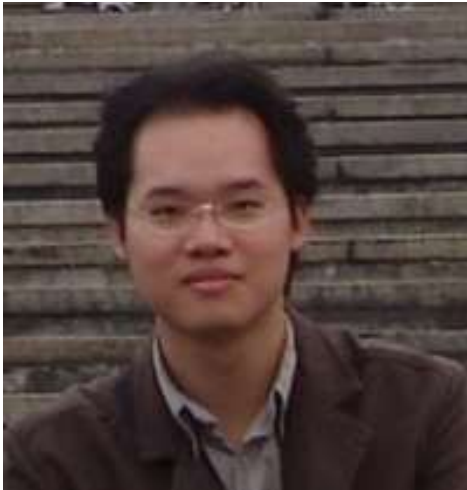


陳宗緯 副教授



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到職年月：2011 年 10 月

研究室：物理館 PH7006

* EDUCATION

- PhD degree, National Taiwan University (2006/6)
- BS degree, National Sun Yat-sen University (2001/9)

* EMPLOYMENT

- National Sun Yat-sen University, Associate professor (2017.2~)
- National Sun Yat-sen University, Assistant professor (2011.10~2017.1)

* SPECIALIZATION

Relativistic Quantum Physics including the theory of special relativity, quantum electrodynamics and quantum anomaly.

* TEACHING

- Mechanics, Thermal physics, Quantum Physics, General Physics, Modern Physics
- Statistical Mechanics

* RESEARCH INTERESTS

- Thomas-BMT equation
- Quantum Ring
- Topology-driven electronic and magnetic properties

* SEARCH PLAN (MOST)

- 2020 時間相關的 F-W 轉換在相對論電子之自旋傳輸之研究
- 2019 相對論自旋動力學在相對論量子資訊上的研究與應用
- 2018 古典與量子自旋動力學的對應原理之研究

- 2017 狄拉克方程之古典對應自旋動力學研究

* RESEARCH ARTICLES (selected publications)

- Selected papers for Thomas-BMT equation:

T.-W. Chen, and D.-W. Chiou, Phys. Rev. A **82**, 012115 (2010).

T.-W. Chen, and D.-W. Chiou, Phys. Rev. A **89**, 032111 (2014).

T.-W. Chen, and D.-W. Chiou, Phys. Rev. A **90**, 012112 (2014).

D.-W. Chiou, and T.-W. Chen, Phys. Rev. A **94**, 052116 (2016).

- Selected papers for spin-Hall effect:

T.-W. Chen, J. M. Haug and G. Y. Guo, Phys. Rev. B **73**, 235309 (2006).

T.-W. Chen, J.-H. Li, and C.-D. Hu, Phys. Rev. B **90**, 195202 (2014).

T.-W. Chen, Phys. Lett. A **384**, 126454 (2020).

T.-W. Chen and H.-C. Hsu, New J. Phys. **23**, 073017 (2021).

* BOOKS

- Selected published books

Tsung-Wei Chen, Solutions Manual for Arfken's Mathematical Methods for Physicists (I~IV). (2012) Hsiao Yuan Publication.

Tsung-Wei Chen, Solutions Manual for F. Mandl's Quantum Field Theory, 2nd ed (new edition). (2011) Hsiao Yuan Publication.

Tsung-Wei Chen, Solutions Manual for Aitchison's Gauge Theories in Particle Physics, 2nd ed. (2010) Hsiao Yuan Publication.