

Xinyu Li

CONTACT INFORMATION	CITA, 60 St George Street, Toronto, ON, M5R 2M8, Canada	xli@cita.utoronto.ca
NATIONALITY	Chinese	
RESEARCH INTERESTS	High Energy Astrophysics, Magnetars, Magnetohydrodynamics, Force-Free Electrodynamics, Plasma Astrophysics, Cosmology, Large Scale Structure, Dark Matter, Galaxy Formation	
EDUCATION	Columbia University , New York, NY, USA Ph.D., Physics, August 2019 <ul style="list-style-type: none">• Thesis Topic: <i>Magnetodynamics Inside and Outside Magnetars</i>• Advisor: Prof Andrei Beloborodov Perimeter Institute / University of Waterloo , Waterloo, ON, Canada M.Sc, Theoretical Physics, June 2013 <ul style="list-style-type: none">• Thesis Topic: <i>Towards an Investigation of Turbulence in High Dimensions</i>• Advisor: Prof Luis Lehner & Prof Robert Myers The University of Hong Kong , HKSAR, China B.Sc, Physics and Mathematics (Double Major), June 2012 <ul style="list-style-type: none">• First Class Honor Tsinghua University , Beijing, China Physics and Mathematics, June 2008 <ul style="list-style-type: none">• One-year preparatory study required by the University of Hong Kong	
WORK EXPERIENCE	<ul style="list-style-type: none">• Postdoctoral Fellow, Canadian Institute for Theoretical Astrophysics 2019/9-present	
AWARDS	<ul style="list-style-type: none">• Joseph C. Pfister Fellowship, Columbia University 2018• Dean's Fellowship, GSAS, Columbia University 2013• Perimeter Scholars International Scholarship, Perimeter Institute 2012• Li Po Kwai Scholarship, The University of Hong Kong 2011/12• HSBC Scholarship for Mainland Students, The University of Hong Kong 2011	
REFEREED JOURNAL PUBLICATIONS	<ol style="list-style-type: none">1. Lam Hui, Austin Joyce, Michael J. Landry, Xinyu Li (alphabetical order), <i>Vortices and waves in light dark matter</i>, arXiv: 2004.011882. Xinyu Li , Philip Chang, Yuri Levin, Christopher D. Matzner, Philip J. Armitage, <i>Simulation of a Compact Object with Outflows Moving Through a Gaseous Background</i>, Monthly Notices of the Royal Astronomical Society, Volume 494, Issue 23. F.Y. Wang, Xinyu Li , D. O. Chernyshov, C.Y. Hui, G.Q. Zhang and K.S. Cheng, <i>Consequences of Energetic Magnetar-like Outbursts of Nearby Neutron Stars: ^{14}C Events and the Cosmic Electron Spectrum</i>, The Astrophysical Journal, 887, 2, (2019)4. Lam Hui, Daniel Kabat, Xinyu Li , Luca Santoni and Sam S. C. Wong (alphabetical order), <i>Black hole hair from scalar dark matter</i>, Journal of Cosmology and Astroparticle Physics, 06, 038 (2019)	

5. **Xinyu Li** , Jonathan Zrake and Andrei Beloborodov, *Dissipation of Alfvén Waves in Relativistic Magnetospheres of Magnetars*, The Astrophysical Journal, 881, 1, (2019)
6. **Xinyu Li** , Lam Hui and Greg Bryan, *Numerical and Perturbative Computations of the Fuzzy Dark Matter Model*, Physical Review D, 99, 63509, (2019)
7. **Xinyu Li** , Yuri Levin and Andrei Beloborodov, *Magnetar Outbursts from Avalanches of Hall Waves and Crustal Failures*, The Astrophysical Journal, 189, 12, (2016)
8. Andrei Beloborodov and **Xinyu Li** , *Magnetar Heating*, The Astrophysical Journal, 261, 20, (2016)
9. **Xinyu Li** and Andrei Beloborodov, *Plastic Damping of Alfvén Waves in Magnetar Flares and Delayed Afterglow Emission*, The Astrophysical Journal, 815, 25, (2015)
10. **Xinyu Li** , Fayin Wang and K.S. Cheng, *Gravitational Effects of Condensate Dark Matter on Compact Stellar Objects*, Journal of Cosmology and Astroparticle Physics, 10, 031, (2012)
11. **Xinyu Li** , T. Harko and K.S.Cheng, *Condensate Dark Matter Stars*, Journal of Cosmology and Astroparticle Physics, 06, 001, (2012)

JOURNAL	The Astrophysical Journal, Journal of High Energy Physics, Astrophysics and Space
REVIEWER	Science, Physical Letter B, New Astronomy

PROGRAMMING	Python, C++, Fortran Mathematica
SKILLS	