

Ka Ho Yuen

Chair of LazTech
Fulbright Fellow 2016
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Research interests Analytical and numerical MHD Turbulence, Grain Alignment, Star Formation

Publications Recent Publication:

1. **Yuen, K.H.**, Chen, J. Hu. Y, et.al. *Statistical tracing of magnetic fields: comparing and improving the techniques*, accepted for publication in ApJ, arxiv:1804.02732
2. Hu, Y., **Yuen, K.H.** & Lazarian A., *Improving Velocity Gradient Technique with Principal Component Analysis*, accepted for publication in MNRAS, arXiv:1802.08772
3. Lazarian.A; **Yuen, K.H.**, Ho, K.W. et. al; *Dispersion of velocity gradients: Mapping magnetization with the Velocity Gradient Technique*, accepted for publication in ApJ, arXiv:1802.02984
4. Lazarian.A & **Yuen, K.H.**, *Tracing 3D distribution of magnetic fields with gradients of synchrotron polarization*, accepted for publication in ApJ, arXiv:1802.00028
5. **Yuen, K.H.**, Lazarian, V., Lazarian, A. *Diagnostics of turbulence properties through Velocity Gradient Amplitudes: Theory and Observations*, ApJL submitted, 2018, arXiv:1802.00024
6. Lazarian.A; **Yuen, K.H.** "Tracing magnetic field using spectroscopic channel gradients", ApJ, 2018, arXiv:1703.03119
7. **Yuen, K.H.** & Lazarian A., "Velocity gradient as a tracer of magnetic field: Alignments in shock and self-gravitating regions" ApJ, submitted, 2017, arXiv:1703.03026
8. Lazarian, A.; **Yuen, K.H.**; Lee,H.; Cho, J, "Synchrotron intensity gradient as a tracer of magnetic field", ApJ, 2017, arXiv:1701.07883
9. **Yuen, K.H.** & Lazarian,A. "Velocity gradient as a tracer of magnetic field: Application to diffuse HI data", ApJL, 2017, arXiv:1701.07944
10. Li, H.-b.; **Yuen, K. H.** et. al, Nature 2015

Awards 2016 Fulbright Fellow
2014 C.N. Yang scholarship (Postgraduate)
2012 New Asia 1977 scholarship
2010 C.N. Yang scholarship (Undergraduate)

Recent invited/awarded conference talks Nov 2015, "The 1st Hong Kong Astrophysics Conference", Hong Kong, **awarded best presenter**
Jun 2016, "The 2016 Cross strait conference in physical Science, Shanghai, **awarded best presenter**
May 2017, "Midwest Magnetic field Workshop"¹, Madison, WI
Oct 2017, "Magnetic Fields in the Universe VI: from Laboratory and Stars to the

¹<http://www.astro.wisc.edu/mmf/2017/>

Primordial Structures”², Natal, Brazil (Invited speaker)
Nov-Dec 2017, ”CMB foregrounds workshop”³ San Diego, CA (Invited speaker)
May 2018, ”Midwest Magnetic field Workshop”⁴, Madison, WI

Referees

Additional information can be obtained from

1. Alex Lazarian, Professor

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2. Jungyeon Cho, Professor

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3. Dmitri Pogosyan, Professor

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²<http://www5.each.usp.br/web/prof/mfuvi/>

³<http://cmbworkshop2017.ucsd.edu/index.html>

⁴<http://www.astro.wisc.edu/mmf/2018/>