

Curriculum Vitae

Ka-Kit Tung

Professor of Applied Mathematics
Undergraduate Advisor
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Fields of Interest

Atmospheric Sciences Climate Modeling

Biography

B.S., Aeronautical Engineering, California Institute of Technology, 1972

Ph.D., Applied Mathematics, Harvard University, 1977

Professor Tung received his baccalaureate and master's degrees at the California Institute of Technology, both in 1972, in the field of Aeronautical Engineering. He earned his doctorate degree in Applied Mathematics at Harvard University in 1977, where he also stayed on for two more years as a postdoc before moving on to MIT, first as an Assistant Professor of Applied Mathematics and then as an Associate Professor. He became a John Simon Guggenheim Fellow in 1985. Professor Tung joined the Department as Professor of Applied Mathematics in 1988 and became Department Chair in August 1993, a position he held until July 2007. He was the Chief Editor of *Journal of Atmospheric Sciences* until 2013. Currently he is a Fellow of the American Meteorological Society, and of the Royal Meteorological Society. Professor Tung's current research interest is in the area of Climate Change.

Publications

- **Book:** Topics in Mathematical Modeling
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- Li, K.-F., and K.K. Tung, 2014: "Quasi-Biennial Oscillation and solar cycle influences on winter Arctic total ozone", *J. Geophys. Res. Atmos.*, **119**, 5823-5835.
- K. K. Tung and J. Zhou, 2013: "Using Data to Attribute Episodes of Warming and Cooling in Instrumental Records", *Proc. of National Academy of Sciences*, **110**.
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- J. Zhou and K. K. Tung, 2013: "Deducing Multidecadal Anthropogenic Global Warming Trends Using Multiple Regression Analysis", *J. Atmospheric Sciences*, **70**, 3-8.
- E. Haam and K. K. Tung, 2012: "Statistics of Solar Cycle-La Nina Connection: Correlation of Two Autocorrelated Time Series", *J. Atmospheric Sciences*, **69**, 2934-2939.
- M. Cai and K. K. Tung, 2012: "Robustness of Dynamical Feedbacks from Radiative Forcing: 2% Solar vs 2 x CO2 Experiments in Idealized GCM", *J. Atmospheric Sciences*, **69**, 2256-2271.
- J. Zhou and K. K. Tung; 2010: "Solar cycle in 150 years of global sea-surface temperature" *J. Climate*, **23**, 3234-3248.
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[Note: Typo in Eqs. (3) and (12). First term should be multiplied by $1/\cos j$. Correct equation used in calculation. Eq. (8) reverse T_E and T .]

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Other Publications

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- K.K. Tung; 1978: "Rossby wave critical layers, absorbing or reflecting?" in *Proceedings of the (Twelfth) Stanstead Seminar*, Publication in Meteorology No. **121**, McGill University, 56-64.
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