

## 教學人員簡介

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## 學歷

博士2001，香港科技大學，數學系

碩士1997，香港科技大學，數學系

學士1995，英國Middlesex University，機械工程學系

## 教學領域

基礎數學：線性代數，微分幾何，微積分

大氣科學

## 研究領域

行星大氣數值模式，氣候動力學，地球及火星的大氣還流和沙塵暴

## 工作經歷

2016/01- 至今，澳門科技大學，太空科學研究所，助理教授

2009/01-2016/01，香港科技大學，數學系，講師

2009/06-2011/06，香港科技大學霍英東研究院，研究助理教授

2006/02-2006/05，意大利Abdus Salam International Centre for Theoretical Physics，訪問學者

2003/02-2007/09，香港城市大學，物理與材料學系，高級研究助理

2001/11-2002/09，National Oceanography Centre, University of Southampton, UK，博士後

## 研究項目

Co-Investigator, 火星大氣中與中尺度動力學相關的沙塵氣候, FDCT 資助項目 (080/2015/A3)

## 專業資格認證及獎項

會員：American Geophysical Union.

## 學術機構及社會任職

國際期刊審稿：

Nature, International Journal of Climatology, Climate Dynamics, Journal of Geophysical Research, Journal of Climate, Atmospheric Environment

## 學術成果

期刊文章（精選）：

Xiao, J., Chow, K. C., Chan, K. L., 2018: Dynamical Processes of Dust Lifting in the northern Mid-latitude region of Mars during the Storm Season. *Icarus* , v317, 94-103.

Chow, K. C., Chan, K. L., Xiao, J., 2018: Dust Activity over the Hellas Basin of Mars during the Period of Southern Spring Equinox. *Icarus* , v311, 306 - 316.

Xiao, J., Z. M. Tan, K. C. Chow, 2018: Structure and formation of convection of secondary rainbands in a simulated typhoon Jangmi (2008). *Meteorology and Atmospheric Physics* , doi.org/10.1007/s00703-018-0599-0.

Chow, K. C., L. SU, J. C. H. Fung, H. Ma, A. K. H. Lau, 2014: Numerical Modeling of a Strong Dust Event over the South China Region in March 2010. *Meteorology and Atmospheric Physics* . v126, 119-138.

Chow, K. C. and J. C. L. Chan, 2010: A dual-scheme approach of cumulus parameterization for simulating the Asian summer monsoon. *Meteorological Applications* , v17, 287-297.

Lu, X., K. C. Chow, T. Yao, J. C. H. Fung, and A. K. H. Lau, 2009: Seasonal variation of the land sea breeze circulation in the Pearl River Delta region. *Journal of Geophysical Research - Atmosphere* , v114, D17112, doi:10.1029/2009JD011764.

Chow, K. C. and J. C. L. Chan, 2009: Diurnal variations of circulation and precipitation in the vicinity of the Tibetan Plateau in early summer. *Climate Dynamics*, v32, 55-73.

Chow, K. C., H. W. Tong, and J. C. L. Chan, 2008: Water vapor sources associated with the early summer precipitation over China. *Climate Dynamics* , v30, 497-517.

Chow, K. C., J. C. L. Chan, J. S. Pal, and F. Giorgi, 2006: Convection suppression criteria applied to the MIT cumulus parameterization scheme for simulating the Asian summer monsoon. *Geophysical Research Letters*, v33, L24709, doi: 10.1029/2006GL028026.

Chow, K. C. and K. L. Chan, 2003: Angular momentum transports by moving spiral waves. *Journal of the Atmospheric Sciences* , v60, 2004-2009.

Chow, K. C., K. L. Chan, and A. K. H. Lau, 2002: Generation of moving spiral bands in tropical cyclones. *Journal of the Atmospheric Sciences* , v59, 2930-2950.

#### 會議論文（精選）：

Chow, K. C., K. L. Chan, J. Xiao, 2018: Sublimation Flow in the Southern Hemisphere of Mars, International Symposium on Lunar and Planetary Science 2018, Macau, 12 -15 June, 2018

Chow, K. C., K. L. Chan, J. Xiao, 2017: Regular Dust Climate on Mars. 3rd Beijing International Forum on Lunar and Deep-space Exploration (LDSE 2017), Beijing, China, 19 -22 September, 2017

Chow, K. C., K. L. Chan, J. Xiao, 2017: Modeling of Dust Climate on Mars. Asia Oceania Geosciences Society (AOGS) 14th Annual Meeting, Singapore, 06-11 August, 2017

Chow, K. C., K. L. Chan, 2017: Prevailing Dust Storms over the Hellas Basin on Mars around southern Spring Equinox. Sixth International Workshop on the Mars Atmosphere: Modelling and Observations, Spain, 17 -20 Jan., 2017

Chow, K. C., K. L. Chan, 2016: Numerical Modeling of the Atmospheric Circulation and Dust Cycle on Mars, International Symposium on Lunar and Planetary Science 2016, Wuhan, 9 -10 June, 2016