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### Education and Positions

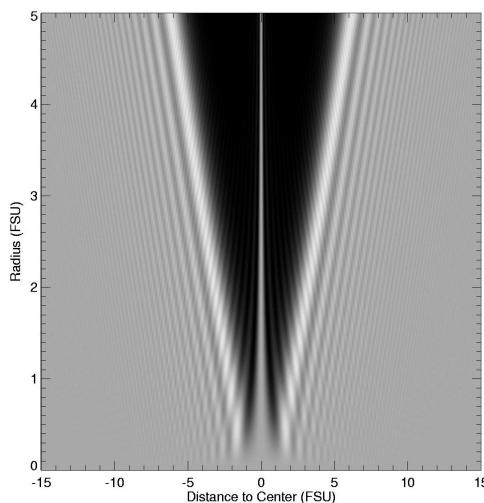
- MS., Physics, National Tsing Hua University, 1988
- Ph.D., Physics, National Tsing Hua University, 1995
- Postdoctoral Fellow, National Space Program Office – Systems Engineering, 1996-1996
- Associated Research Fellow, National Space Program Office –Systems Engineering, 1996-1998
- Postdoctoral Fellow, Institute of Astronomy and Astrophysics, Academia Sinica, 1998-present

### Selected Publications

- Nihei, T. C.; Lehner, M. J.; Bianco, F. B.; King, S.-K.; Giamarro, J. M.; Alcock, C. “Detectability of Occultation of Stars by Objects in the Kuiper Belt and Oort Cloud”, *Astronomical J.*, 2007, 134, 1596
- Chang, H.-K., Liang, J.-S., Liu, C.-Y., and King, S.-K., “Millisecond dips in the RXTE/PCA light curve of Sco X-1 and trans-Neptunian object occultation”, *Monthly Notice of Royal Astronomical Society*, 2007, 378, 1287
- Chang, H.-K.; King, S.-K.; Liang, J.-S.; Wu, P.-S.; Lin, C.-C.; and Chiu, J.-L., “Occultation of X-rays from Scorpius X-1 by small trans-neptunian objects”, *Nature*, 2006, 442, 660
- King, S.-K.; Alcock, C.; Axelrod, T.; Bianco, F.; Byun, Y.-I.; Chen, W. P.; Cook, K. H.; Chang, Y.-H.; Dave, R.; Giamarro, J.; Lee, T.; Lehner, M.; Lissauer, J.; Marshall, S.; Mondal, S.; de Pater, I.; Porrata, R.; Rice, J.; Schwamb, M.; Wang, A.; Wang, S.-Y.; Wen, C.-Y.; and, Zhang, Z.-W., “Status of the TAOS Project and a Simulator for TNO Occultation”, in *Advances in Geosciences: Vol.III Planetary Science*, edit. Wing-Huen Ip & Anil.Bhardwaj *et al.*, Singapore, World Scientific Publishing Company, 2006, p.345-358
- Alcock, C.; Dave, R.; Giamarro, J.; Goldader, J.; Lehner, M.; King, S.-K.; Lee, T.; Wang, A.; Wang,

S.-Y.; Wen, C.-Y.; Chen, W. P.; Cook, K.; Marshall, S.; Porrata, R.; Byun, Y.-I.; de Pater, I.; Rice, J.; Lissauer, J., “TAOS: The Taiwanese-American Occultation Survey”, *Earth, Moon, and Planets*, 2003, 92, 459-464

- Chen, W. P.; Zhang, Z. W.; King, S. K.; Alcock, C.; Byun, Y. I.; Cook, K. H.; Dave, R.; Giamarro, J.; Lee T.; Lehner, M.; Liang, C.; Lissauer, J.; Marshall, S.; de Pater, I.; Porrata, R.; Rice, J.; Wang, A.; Wang, S. Y.; and Wen, C. Y., “Fast CCD Photometry in the Taiwan-America Occultation Survey”, *Baltic Astronomy*, 2003, 12, 568



### Research Interests

My current researches are mainly in occultation of Trans-Neptunian objects (namely, TNOs), especially some theoretical issues related. I've studied the diffraction properties of a diffraction shadow. A C-code was created as a simulator for TNO occultation. I was deeply involved in the TAOS (Taiwanese-American occultation Survey) project. I looked for TNO occultation in X-ray data with my collaborators as well. Other than diffraction, I'm also interested in the dynamic issues since I used to work on satellite orbit analysis at NSPO. My PhD thesis was addressed on a quantum feature of an ideal Michelson interferometer, which related to the detection of gravitational waves predicted by general relativity.