

Brief Profile of Professor Chau, Ling-Lie (喬玲麗)

Thanks to the invitation by Professor Rena Zieve, leading organizer of
2019 APS Conference for Undergraduate Women in Physics (2019APS-CUWiP)

<https://www.aps.org/programs/women/workshops/cuwip.cfm>

at UC Davis <http://cuwip.physics.ucdavis.edu/cuwiphome.html>

The original profile appeared in <http://cuwip.physics.ucdavis.edu/speakers.html>

An addendum is added here, inspired by students' discussions and questions at 2019APS-CUWiP

Chau, Ling-Lie (喬玲麗) is a Professor Emerita in Physics and GGAM (Graduate Group of Applied Mathematics) UC Davis. The areas of her interest and research have been theoretical physics and mathematical physics. For a brief biography about her see <http://chau.physics.ucdavis.edu/download/ChauUCDmagF2014.pdf>

Her advice to students: *Find what you cannot live without. Don't worry about what is hot or cold in the professional world. Find and pursue what you love to do the most, everything else Will fall into place.*

As it happened, that was what she instinctively did, with no advice from anyone. She discovered her intense interest and joy in studying physics because of an excellent science teacher at the outstanding Tainan Girls School in Tainan (TNGS), Taiwan, where she studied 1951-57. Her passion in physics has served her well. She had never applied for a job --- she was always recruited.

In 2017 her high school TNGS celebrated its centenary (TNGS100). It was a joyous huge occasion. Prof. Chau was profiled https://tngs100.blogspot.com/2017/07/blog-post_70.html (if interested in its English translation, try using <https://translate.google.com/>), given two awards, and invited to give a talk to the assembly of all students. The title of the talk she chose was (in English translation) *"100 Years Progresses in Physics (particle, condensed matter, cosmology) and Contributions from Women Scientists"* See slides (some pages are followed by their English translation) <http://chau.physics.ucdavis.edu/ChauLL-TNGS100-talk2017Dec19-dstPost.pdf>
Attached (Photo-3) is a photo of Prof. Chau with a display of mementos from TNGS100.

Addendum --- inspired by discussions with students at the conference and their questions

In her TNGS100 talk, see the weblink given above, Prof. Chau referred to, on p.14/40, an excellent video with animation telling the story to nonexperts about the observation of gravitational wave in Chinese <https://www.youtube.com/watch?v=42L2ArowWkK>.

However, she could not find one as good in English. She would appreciate to know if there is one.

For some glimpses about Prof. Chau's research work, see her paper (in particular the references)

http://chau.physics.ucdavis.edu/Chau-YM60-Proc-WS_Pub-2016May-dstr.pdf

published in the Proceedings of Conference on 60 Years of Yang-Mills Theory in 2016;

The international conferences she organized --- the title pages and photos are given in the following

<http://chau.physics.ucdavis.edu/Text/pdfs/NATO-Intl-Conf-Diff-Geo-Th-Phys-UCD-1988-Jul2-8.pdf>

<http://chau.physics.ucdavis.edu/Text/pdfs/Nankai-lects-Math-Phys-Chern-Yang-Faddeev-Chau-1987-8.pdf>

<http://chau.physics.ucdavis.edu/Text/pdfs/Weak-Interactions-Erice-1984-p1-14.pdf> ;

And the particularly memorable conference celebrating Yukawa theory 50 years at Kyoto in 1985, in which Prof. Chau was the only female speaker and the only female physicist in the photo of 229, among whom were many Nobel laureates, see the list on p.5/10 and the photo on p.6/10 in the following

<http://chau.physics.ucdavis.edu/download/Yukawa50Kyoto1985.pdf> .

She has the good fortune of having gotten to know and been inspired by Prof. CN Yang --- 1957 Nobel laureate in physics etc and an all-time-great physicist and Prof. SS Chern --- 1976 National Medal of Science for Mathematics etc and an all-time-great mathematician. See the two mementos: Photo-1 and Photo-2.



Photo-1: CN Yang (left) and SS Chern (right) painted by Z Fan 范曾
(A limited-number reproduction, gift from Prof. CN Yang to Prof. LL Chau, now on the east wall of UCD Physics 421)



Photo-2: CN Yang, SS Chern (center), and LL Chau, 1980s at Chern's Berkeley home



Photo-3: LL Chau & a display of mementos from TNGS100
2018Feb at her El Macero home (south east of Davis) since 1987