

THURSDAY COLLOQUIUM

Department of Physics, Tsinghua University

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Title Shedding light on the Dark Universe

Speaker 陶嘉琳 教授

清华大学

Venue ZhengYu-Tong Lecture Hall & Date 16:00, June 16, 2011

Abstract:

What science has taught us in the last century about the Universe is the precise measurement of our ignorance. What we know about it, represents at most 6% of the energy content of the Universe. Some 25% is in the form of Dark Matter, 2/3 is due to an unknown Dark Energy. Dark Energy could be Einstein's cosmological constant but field theorists cannot explain its value as vacuum fluctuations.My talk will focus on the main research directions which should shed some light on the mysterious dark components.

Introduction to the Speaker



Charling Tao is a sino-French Hua qiao and a particle physicist who has drifted into astrophysics and cosmology. After a Bachelor degree in Mathematics and Physics in Orsay (France) in 1975, she obtained a Master and PhD from Harvard University in experimental high energy physics. During her PhD years she was a visiting scholar in Fermilab and Oxford. She joined in 1979 the CERN UA1 team as a CERN fellow and associate and was active in the Central Detector group, and the data analysis on the discovery of the W and Z bosons mediating weak interactions. She obtained a permanent position in French CNRS in 1985.She is a CNRS Director of research in CPPM(Center for Particle Physics in Marseilles) and the head of the Tsinghua Center for Astrophysics since last year. She is now working in SNFactory, and the co-lead of the SN and transient working group of the Euclid space project, and a member of the LSST team. Throughout her career, Charling Tao tries to combine harware and experimental expertise with phenomenological analysis to unveil the mysteries of the invisible Universe.