



# 新聞稿 PRESS RELEASE

香港中文大學物理學講座教授楊綱凱教授於昨日(廿二日)在該校主持就職演講，主題為「物理學中的無序和耗散問題」。

楊教授在講座中指出科學工作的要旨，就是在自然界尋找規律，然而，決定性系統經常呈現好像沒有規律的無序運動，物理學界近年對此甚感興趣。無序的運動令訊息消滅，熵增加，並為時間的流逝界定了指向，而這個指向又與耗散有密切的關係。耗散是指能量、概率、以致訊息的消滅。但是，耗散與量子力學互不相容，量子力學又是描述微細系統所不可或缺的工具。所以，無序和耗散現象引起了一系列原則性的物理問題。楊教授並以中大物理系的一些關於凝聚態物理學、光學和宇宙學的研究工作，對這些問題作出介紹和說明。

一九九一年三月廿二日

Professor Kenneth Young, Professor of Physics at The Chinese University of Hong Kong gave his Professorial Inaugural Lecture yesterday (March 22) on "Disorder and Dissipation in Physics".

In his Lecture, Professor Young pointed out that although science is often regarded as the search for order in Nature, there has been considerable interest in recent years in the appearance of disorder in deterministic systems. Disorder leads to loss of information, or increase in entropy, providing an arrow of time. This arrow of time is related to dissipation --- the "loss" of energy, probability or information. On the other hand, dissipation apparently conflicts with quantum mechanics, which is needed for describing small systems. Professor Young further illustrated these ideas and related concepts with research work on condensed matter physics, optics and cosmology carried out at the Physics Department of The Chinese University of Hong Kong.

March 22, 1991