

Special Program in Applied Mathematics and Applied Mechanics

Introduction to Two-Phase Heat Transfer Component Technologies and Applications II

Prof. Chien-Chih Yeh

2016 - 03 - 22 (Tue.)

15:00 - 18:00

103, Mathematics Research Center Building (ori. New Math. Bldg.)

Two-phase heat transfer components which have very high heat transfer capacity were applied to the aerospace, military, industrial, and other fields in the past. In the last ten years, with a view to solving heat generated from high-speed processing units, two-phase heat transfer components are introduced to the field of heat dissipating devices. Traditional design thinking of heat dissipating devices is changed. Thus, two-phase heat transfer components are widely used in desktop computers, laptop computers, smartphones, data center servers, and other electronic products.

In this presentation, in order to enhance students' understanding about the applications of thermal management technologies, we will introduce and discuss the fundamental principles, manufacturing technologies, and the latest developments and applied potential of the most commonly used two-phase heat transfer components, including heat pipe, vapor chamber, and loop heat pipe.



CASTS

Center for Advanced Study in Theoretical Sciences, NTU