

國立陽明交通大學應用數學系

學術演講公告

主講人：Prof. Charlotte Pollet (Center for Human Sciences, NYCU)

講題：Genealogy of Diagrams and Equations in pre-modern China

時間：113年11月5日(星期二) 下午 14:00 –15:00

地點：(光復校區) 科學一館 213 室

Abstract

The study of mathematics in China has often focused on the ‘procedure of the Celestial Source’ (天元術 *tian yuan shu*), which is used to set up polynomial equations. The geometrical ancestors of this procedure are less known. The 益古演段 *Yigu yanduan*, authored by the 13th century mathematician, 李冶 *Li Ye* (1192-1279), however, presents the procedure alongside its two geometrical counterparts, the ‘Section of Pieces [of Areas]’ (條段 *tiao duan*) and the ‘Old Procedure’ (舊術 *jiu shu*). The three procedures are known to represent three generations of algorithms to set up quadratic equations. This presentation aims to make the geometrical procedure ‘speak’ about its genealogy. That is to say, to attempt the reconstruction of the evolution of the geometrical roots of the famous procedure of the Celestial Source. The construction of negative coefficients plays a pivotal role in this evolution. It also is possible to distinguish several layers of composition that reflect several episodes in the development of the quadratic equation with negative coefficients. In other words, this analysis raises a philological problem pertaining to the question of textual transmission and the nature of authorship. This is the opportunity to show a landscape of history of mathematics in China, from its sources to its connection to Taoism.

敬請公告 歡迎參加

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