

# 國立陽明交通大學應用數學系 學術演講公告

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講題：An algebraic proof of Thurston transversality for  
bicritical polynomials

時間：111 年 3 月 8 日(星期二) 下午 2:00 –3:00

地點：(光復校區) 科學一館 223 室

## Abstract

Thurston transversality is a celebrated result of holomorphic dynamics. Roughly speaking, Thurston showed that curves given by dynamical conditions intersect transversally. Let me give an easy example to illuminate the idea. The critical point of the polynomial  $f_c(x)=x^2+c$  is 0. And, we may wonder how many solutions  $c\in\mathbb{C}$  we have if 0 has a period, say 3. This question is precisely equivalent to solving the equation  $f_c^3(0)=0$  where  $f_c^3$  is the third iterate of  $f_c$ . Thurston transversality then says there must be 4 distinct solutions because  $f_c^3(0)$  is a degree 4 polynomial in terms of  $c$ . In this talk, we will give an algebraic proof of Thurston transversality in the periodic case for bicritical polynomials. This is also the first algebraic proof for bad reduction.

敬請公告 歡迎參加

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