

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：The Differential Geometry of Curves in Space
Forms of Pseudo-Hermitian Manifolds

時間：113 年 3 月 19 日(星期二) 下午 14:00 –15:00

地點：(光復校區) 科學一館 223 室

Abstract

The exploration of submanifolds in spaces of constant sectional curvature is fundamental to Differential Geometry. Since 2015, significant progress has been achieved by Chiu-Huang-Lai and Chiu-Ho, who established the Fundamental Theory of Curves and Surfaces in the Heisenberg group H_1 and the CR sphere S^3 respectively. Their research resulted in the identification of a comprehensive set of geometric invariants, specifically curvatures for curves and surfaces. Acting as pseudo-Hermitian manifolds, H_1 and S^3 represent special cases of CR manifolds, embodying zero and positive constant sectional curvatures, respectively. Recently, Pak Tung Ho (Tamkang University) and I have extended our research to include the final model case—the constant negative sectional curvature—in the product space consisting of a unit 2-sphere and the real line. This presentation will provide a concise review of our previous findings and will concentrate on developing geometric invariants in this product space. Furthermore, I will explore the proof of the Fundamental Theorem of Curves, supported by a series of intriguing examples.

敬請公告 歡迎參加

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