

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

GEOMETRY SEMINAR

Holomorphicity of totally geodesic isometries between bounded symmetric domains

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Abstract

Let Ω and Ω' be two bounded symmetric domains. In this talk, we investigate the properties of totally geodesic isometric embedding $f: \Omega \rightarrow \Omega'$ with respect to their Bergman/Kobayashi metrics. In particular, we discuss the question of holomorphicity of totally geodesic isometric discs $f: \Delta \rightarrow \Omega$ that extend sufficiently smooth up to the boundary. As an application, we give a sufficient condition for a totally geodesic isometric embedding $f: \Omega \rightarrow \Omega'$ to be holomorphic or anti-holomorphic. This is a joint work with Aeryeong Seo.

Date: January 23, 2024 (Tuesday)

Time: 4:00 – 5:00pm

Venue: Rm 210, Run Run Shaw Bldg., HKU

All are welcome