THE UNIVERSITY



OF HONG KONG

Institute of Mathematical Research Department of Mathematics

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GEOMETRY SEMINAR

Derived differentiable manifolds

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Abstract

One of the main motivations behind derived differential geometry is to deal with singularities arising from zero loci or intersections of submanifolds. Both cases can be considered as fiber products of manifolds which may not be smooth in classical differential geometry. Thus we need to extend the category of differentiable manifolds to a larger category in which one can talk about "homotopy fiber products". In this talk, we will discuss a solution to this problem in terms of dg manifolds. The talk is mainly based on a joint work with Kai Behrend and Hsuan-Yi Liao.

Date: March 1, 2023 (Wednesday)

Time: 4:00 – 5:00pm

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

All are welcome