

The Hong Kong University of Science and Technology

Department of Mathematics

Seminar on Geometry

On Feynman Geometry By

Professor Andrey LOSEV National Research University Higher School of Economics, Russia

Abstract

We introduce a notion of Feynman geometry on which quantum field theories could be properly defined. A strong Feynman geometry is a geometry when the vector space of A_{∞} structures is finitely dimensional. A weak Feynman geometry is a geometry when the vector space of A_{∞} structures is infinite dimensional while the relevant operators are of trace class. We construct families of Feynman geometries with "Continuum" as their limit.

Date : Friday, 3 November, 2017 Time: 11:00a.m.-12:00noon Venue: Room 5508, Academic Building (near Lifts 25&26), HKUST All are welcome!