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# *Joint Harvard-CUHK-YMSC Differential Geometry Seminar*

# Lagrangians and mirror symmetry in the Higgs bundle moduli space

Abstract: The talk concerns recent work with Tamas Hausel in asking how SYZ mirror symmetry works for the moduli space of Higgs bundles. Focusing on *C\*-*invariant Lagrangian submanifolds, we use the notion of virtual multiplicity as a tool firstly to examine if the Lagrangian is closed, but also to open up new features involving finite-dimensional algebras which are deformations of cohomology algebras. Answering some of the questions raised requires revisiting basic constructions of stable bundles on curves.

*By*

## Professor Nigel Hitchin

University of Oxford

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| **Date:** | **December 1, 2021 (Wednesday)** |
| **Time:** | **4:00pm – 5:00pm (Hong Kong Time)** |
| **Zoom Link:** | **https://cuhk.zoom.us/j/99285825827** |
| | (Meeting ID: 992 8582 5827; Passcode: 20211201) |

*All are Welcome*