THE UNIVERSITY   **OF HONG KONG**

Institute of Mathematical Research
Department of Mathematics

GEOMETRY SEMINAR

Integrable systems on nilpotent Lie subalgebras via cluster theory

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ABSTRACT. Let G be a complex semisimple Lie group and $Lie(G) = \mathfrak{n} \oplus \mathfrak{h} \oplus \mathfrak{n}$ a triangular decomposition. We construct an integrable system on the dual space of $\mathfrak{n}$ equipped with the Kirillov-Kostant-Souriau Poisson structure, using a Poisson-cluster seed for G/B (equipped with the standard Poisson structure) arising from symmetric Poisson CGL extension. This is joint work in progress with Yu Li and Jiang-Hua Lu.

Date:	August 24, 2023 (Thursday)
Time:	3:00pm – 4:00pm
Venue:	Room 210, Run Run Shaw Building, HKU

All are welcome