BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

FREDHOLM THEORY OF TIAN–YAU METRICS

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Oct 13, 2021, **4-5pm** MCS B31

Tea: 3:45pm in Room B24

Abstract: We will discuss a family of four-dimensional non-compact hyperKähler metrics called Tian–Yau metrics, modelled by the Calabi ansatz with inhomogeneous collapsing near infinity. Such metrics are ALH* type of gravitational instantons and were used recently as the scaling bubble limits for codimension-3 collapsing of K3 surfaces, where the study of its Laplacian played a central role. I will talk about the Fredholm mapping property of such metrics and related applications including L^2 cohomology, asymptotic expansions and perturbations. This is an ongoing work joint with Rafe Mazzeo.

See `http://math.bu.edu/research/geom/seminar.html` or contact Yu-Shen Lin (*yslin@bu.edu*) or Siu-Cheong Lau (*lau@math.bu.edu*) for more information.