## **Gravitational Physics and Astronomy 2022**



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## The possible quantization of Riemann curvature tensor on 3-Sphere

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With the minimum measurable length uncertainty emerged from the relativistic generalized uncertainty principle in curved spacetime and the generalization of the pseudo-Riemannian manifold to eight-dimensional tangent bundle, the fundamental tensor is conformally modified to accommodate quantum-mechanical, geometric, and gravitational imprints, especially in the relativistic regime. In this talk, I shall be presenting the possible quantization of the Riemann curvature tensor on 3-sphere.

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