APPLIED MATHEMATICS SEMINAR

Einstein's General Theory of Relativity and cosmology in the context of Raychaudhuri Equation

by

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Abstract: The Raychaudhuri Equation (RE) is essentially a geometric identify relating geometric and kinematic quantities. In context of cosmology it can be treated as the evolution equation of the expansion scalar. In the talk the RE is treated in two ways. In the context of general relativity the singularity of the space time will be analyzed while in the perspective of cosmology it will be shown how evolution of the universe, different phases of it can be analyzed using RE. Finally, bouncing scenario will be examined from the RE.

Date: Monday, November 18, 2024
Time: 16:00-17:00, GMT+3
Place: ZOOM
To request the event link, please send a message to yheydarzade@bilkent.edu.tr.