



INVITATION

as part of the Gravitational Physics Literature Seminar

to the talk by

Daniel GRUMILLER

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on

“NEC angle in critical collapse”

Abstract:

We identify a new critical parameter in Choptuik's gravitational collapse: the angle at which null energy condition (NEC) saturation lines intersect at the center of the critical spacetime. These NEC lines coincide with regions of vanishing curvature, dividing spacetime into stripes of positive and negative curvature. By numerically solving Choptuik's original system we find the NEC angle to be $\alpha=0.64$ (about 37 degrees) and analytically derive $\alpha=2\operatorname{arccot}(D-1)$ for any spacetime dimension $D>3$.

Time: Wednesday, 20 November 2024, 2:15 p.m.

Location: Seminar Room A, Währinger Straße 17, 1090 Vienna, 2nd floor

<https://univienne.zoom.us/j/6540036841?pwd=SytyVkZJZzNyRG9IMm13ejlHeHRRUT09>