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#### General Relativity and Quantum Cosmology

# Time dependent embedding of spherically symmetric Rindler-like spacetime

#### Hristu Culetu

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An anisotropic cosmic fluid with radial heat flux which sources a time dependent Rindler-like geometry is investigated. Even though its energy density \$\rho\$ is positive, the radial and transversal pressures are negative and the strong energy condition is not satisfied. The congruence of "static" observers is not geodesic and the heat flux is oriented outward. We computed the Misner-Sharp energy associated with the Rindler-type metric embedded in a spatially flat FLRW universe and found that the Weyl energy is vanishing thanks to the conformally flat form of the spacetime. The null geodesic expansions are computed and one finds that only one of the two apparent horizons is located inside the event horizon. The properties of the Rindler-like geometry embedded in the conformally-flat de Sitter spacetime are investigated.

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