Symbol		Meaning

$;$ — Covariant derivative

$(\ )^{\cdot}$ — Covariant derivative of ( ) with respect to unit time-like vector U^a.

$\pounds_U$ — Lie derivative with respect to U^a.

$\pounds_H$ — Lie derivative with respect to H^a.

σ_{ab} — Shear tensor.

ω_{ab} — Rotation tensor

h_{ab} — Projection operator

η_{abcd} — Permutation tensor

R_{abcd} — Curvature tensor

C_{abcd} — Weyl-Conformal tensor

R_{ab} — Ricci tensor

R — Ricci scalar

$(\ )$ — Symmetrization

$[\ ]$ — Anti-symmetrization.

Throughout the text we have used 4-dimensional Riemannian space-time with the metric of signature (-, -, -, +).

oOo