$$\mathbf{S} \equiv \sqrt{\gamma} \begin{pmatrix} 0 \\ \frac{1}{2} \, \alpha \, S^{ik} \, \partial_j \, \gamma_{ik} + S_i \, \partial_j \, \beta^i - (\tau + D) \, \partial_j \, \alpha \\ \alpha \, S^{ij} \, K_{ij} - S^j \, \partial_j \, \alpha \end{pmatrix}$$