

General Relativity and Quantum Cosmology

On analogues of black brane solutions in the model with multicomponent anisotropic fluid

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A family of spherically symmetric solutions with horizon in the model with m -component anisotropic fluid is presented. The metrics are defined on a manifold that contains a product of $n-1$ Ricci-flat "internal" spaces. The equation of state for any s -th component is defined by a vector U^s belonging to R^{n+1} . The solutions are governed by moduli functions H_s obeying non-linear differential equations with certain boundary conditions imposed. A simulation of black brane solutions in the model with antisymmetric forms is considered. An example of solution imitating M_2-M_5 configuration (in $D=11$ supergravity) corresponding to Lie algebra A_2 is presented.

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