

# Stationary macroscopic motions of a relativistic gas and its relation to the symmetries of the gravitational field

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## Abstract

On the basis of an investigation of the Einstein-Vlasov self-consistent system of equations, a classification is given of the gravitational fields due to a collisionless gravitating gas, using the groups of the motions. It is shown that the time-like Killing vector, directed along the vector of the macroscopic gas velocity, is the center of the group of motions Gr. © 1979 Plenum Publishing Corporation.

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