



Contribution ID : 281

Type : Oral talk

## Nonstationary configurations of a spherically symmetric massless scalar field

*Wednesday, 30 November 2022 18:45 (15)*

Nonstationary configurations of a massless spherically symmetric scalar field are considered. We use an approach to the construction of nonstationary gravitating configurations of a scalar field, which makes it possible to reduce the Einstein-scalar field system to a single equation written in invariant quantities. New exact and numerical nonstationary solutions for a massless scalar field are obtained. These solutions are associated with characteristic functions of a special form. It is shown that there are no asymptotically flat solutions for the considered classes of characteristic functions.

**Primary author(s)** : Dr. TCHEMARINA, Julia (Tver State University); POTASHOV, Ivan (Tver State University)

**Presenter(s)** : Dr. TCHEMARINA, Julia (Tver State University)

**Session Classification** : Gravitation and Cosmology

**Track Classification** : Gravitation and cosmology