ON THE EVOLUTION OF INVARIANT RIEMANNIAN METRICS ON ONE CLASS OF GENERALIZED WALLACH SPACES UNDER THE INFLUENCE OF THE NORMALIZED RICCI FLOW

N. A. Abiev

The paper is devoted to the study of the evolution of invariant Riemannian metrics on the special class of generalized Wallach spaces corresponding to the case of $a_1 = a_2 = a_3 = 1/4$. We prove that the normalized Ricci flow evolves all generic invariant Riemannian metrics into metrics with positive Ricci curvature.

Key words and phrases: generalized Wallach space, Riemannian metric, Ricci flow, Ricci curvature, sectional curvature, dynamical system, singular point.

Abiev Nurlan Abievich

Taraz State University, Taraz, 080000 Kazakhstan. E-mail: abievn@mail.ru Received August 17, 2016

Translated into English:

Siberian Advances in Mathematics, V. 27, N 4, 227–238 (2017). DOI: 10.3103/S1055134417040010

© N. A. Abiev; 2017