

????????, ?????????, ????????? (????????, 7. III 1956). ????????? ?????????? ?? ??????-
????????????? ????????? ? ????????? 1979, ?????????? 1985. ? ?????????? ?????????? ? ??????,
?? ????? ????????? ? ?????????. ????????? ? 1987. ? ?????? -- ?????????? ?????????? ??????????,
?? ? ?????? ?????????????????????? ?????? (Center for Data-Driven Discover?), ??? ? ???
????????????????? ? ????????? ? ?????? ?????????, ?????????? ?????????, ?? ? ??????
?????? ? ?????? ?????????? ? ??????. ?????? ? ?????? ?????????? 2014. ? 2. ?? ???? ?????
????????? ?? 2004. ?????????? ? ?????????? ?????? ? ????????? ?????????? ??????????. ?????????
?? ????? ? ?????????? ?????????? ??? ?????????? ?????????????? 1992--2002. ?? ? ? ?????????
????????? ????????? ? ?????? ?????????? ?????????? ??????????????. ?????? ?????
????????? ? ??: ?????????? ?????? ?????? ?????? ? z ????? ? 1; ?????? ?????????????? ?????? ?
????????????? ??????; ?????????????? ?????? ?????????? ?????????? ? ?????? ?????? ?????? ?????? ?
????????????? ?????????? ? ?????????? ??????????; ?????? ??? ?????? ?????????? ? z ????? ? 3; ?????
????????? ?????? ? ?????????? ?????????????????? ??????; ??, ?????????? ??????????, ?????????????? ?????;
????????????? ?????????? ?????????? ?????????????? ????? ? ????? ? ?????? ??????????????; ??????
????????????? ?????????? ????????? ? ?????? ?????? ??????????????; ?????????? ?????????? ?????? ?
????????????? ? ?????????? ?????????????????? ? ?????? ? ?????? ?????????? ?????????? ??????
????????? ?????? ?????? ?????? ? z ????? ? 4 ? ??? ?????? ?????????? ?????????? ??????; ??????????
????? ?????? ?????? ??? ?????????, ?? ? ?????????? ?????? ?????????? ??????; ?????? ?????
????????????? ??????, ?????????????? ? ??? ?????? ??????????; ??? ?????? ?????????? ??????????
?????????????????; ?????????? ?????? ??????????????????????. ? ?? ?????? ? ?????? ?????????????
????????? ?????????? ??????. ????? ? 1984. ?????? ?????????????? ? ?????? ? ?????????
????????????????? ?????????, 1991. ?????? ?????????????????, ? 1996. ????. ?????????? ? ?????????????????
????????? ?????? ?????????? Nature, ? ??? ??? 25.000 ?????? ?? ????? ? 1.000 ??????????????
????????? 1981--1997, ?????? ?????????? ?????????? ? ?????? ?????????????? (ISI). ?????? ??? ??? ?????
???????? 24421 ?????????.

????: ? I. R. King, „Surface Photometry in Cores of Globular Clusters", *Astrophys. J.*, 1984, 277, L 49; ??????,
„Discovery of a Probable Galaxy with a Redshift of 3.218", *Astrophys. J.*, 1984, 299, L1; ? M. Davis,
„Fundamental Properties of Elliptical Galaxies", *Astrophys. J.*, 1987, 313, 59; ??????, „Spectral Constraints on
the Redshift of the Optical Counterpart to the ?-ray Burst of 8 May 1997", *Nature*, 1997, 387, 888; ??????,
„Identification of a Host Galaxy at Redshift $z = 3.42$ for the ?-ray Burst of 14 December 1997", *Nature*, 1998, 393,
6680, 35; ??????, „On the Threshold of the Reionization Epoch", *Astrophys. J.*, 2001, 560, L 5; ? R. A. Daly, „A
Model-Independent Determination of the Expansion and Acceleration Rates of the Universe as a Function of
Redshift and Constraints on Dark Energy", *Astrophys. J.*, 2003, 597, 9.

?. ?. ??????????????

*????? ? ????????? ? 2. ????? III ??? ?????? ?????????????? (2021)