NGC 6067: A spectroscopic study

J. Alonso-Santiago, I. Negueruela, A. Marco and R. Dorda

Departamento de Física, Ingeniería de Sistemas y Teoría de la Señal, Escuela Politécnica Superior, University of Alicante, Apdo 99, 03080 Alicante, Spain

Abstract

NGC 6067 is a young open cluster in the Norma Cloud. Its age is around 100 Ma. It hosts a large population of evolved stars: 14 luminous red stars (most of which K Ib supergiants and late-G/early-K giants), 6-8 B giants, two A/F supergiants and two Cepheids (F/G supergiants). All this would imply that NGC 6067 represent one of the best laboratories in the Galaxy to study the evolution of intermediate-mass stars. Thackeray et al. (1962, MNRAS 124, 445T) performed the first complete study of this cluster but it has been poorly studied since then.

We obtained high resolution echelle spectra (R=48000) using FEROS (Fiber Extended Range Optical Spectrograph) mounted on the ESO 2.2 m telescope at La Silla Observatory (Chile) in May 2011. Here we present preliminary results based on this spectroscopy and the UBV photometry listed in Terndrup & Pinsonneault (2007, ApJ 671, 1640).