

Observations of newly found objects with the B[e] phenomenon

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The B[e] phenomenon has both photometric and spectroscopic signatures. Photometrically it manifests itself by a large infrared excess due to radiation of the circumstellar dust. This feature can serve as a selection criterion for finding new candidates in large photometric databases. Based on color-indices of known objects showing the phenomenon, we searched all-sky catalogs which contain optical and near-IR magnitudes, and selected over 100 candidates. Nearly 40 objects from this sample have been observed spectroscopically and photometrically in the optical and near-IR region. We present a list of those with detected hot star features and forbidden line emission, show their spectra and spectral energy distributions, and discuss their possible nature and evolutionary status.

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