ՀԱՅԱՍՏԱՆԻ ԳԻՏՈՒԹՅՈՒՆՆԵՐԻ ԱԶԳԱՅԻՆ ԱԿԱԴԵՄԻԱՅԻ ԶԵԿՈՒՅՑՆԵՐ
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A. L. Gyulbudaghian

On Trapezium (in Orion) - Type Systems

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1.STARS. One of the basic statements of the Ambartsumian's conception of stellar systems formation is the existence in these systems of the Trapezium-type configurations. The distances between the components in such systems are the values of the same order ([1]). The Trapezium in Orion consists of OB stars and belongs to the association Ori OB 1.

During last years the new type Trapezium-type systems were discovered. These systems consist of sources invisible in optics, but detectable in IR and/or radio. These sources are embedded in molecular clouds, their bolometric luminosities correspond to the luminosities of OB or WR type stars. Such systems were fount by us in ([2-7]). It is rather probable that these systems, after a definite period of time, when because of influence of their radiation and/or stellar wind the part of molecular cloud, in which they were embedded, is transformed into HII region, and as a consecuence the system will appear as bright in optics Trapezium-type system, consisting of OB or WR type stars. The distances between the components of these systems are systematically less than in the classical Trapezium-type systems (e.g. in Orion). Such systems are tight systems.

In ([8]), as well as in the catalogues ([9,10]) we have found Trapezium-type systems consisting of B stars. The distances between the components in these systems are several times more than in the classical Trapezium-type systems. These are broad Trapezium-type systems.

Hence we can make a conclusion about the existence of an evolutionary connection between the three preceiding types of Trapezium-type systems of OB stars: 1.the systems, consisting of IR and/or radio sources in molecular clouds (0.01-0.1pc), 2.the classic systems (like Trapezium in Orion) (~0.1pc), 3.the broad systems (~1pc).

There are also Trapezium-type systems, all components of which are T Tauri type stars ([11]) or some of the components are T Tauri type stars ([12]). The

existence of such systems is an argument in favour of an origin of low mass stars by groups, like the stars of large masses (O, B, WR). We have to mention here that there is not a question about the stability of such systems, consisting of low mass stars. Such systems are unstable because of low values of gravitational contraction between the components.

2.GALAXIES. Ambartsumian mentioned in ([13]), that "The components of each multiple system of galaxies have common origin. The majority of multiple systems of galaxies has a Trapezium-type configuration. The Trapezium-type multiple systems of galaxies in the cases, when the masses of components are comparable, have to be unstable". As a confirmation of that statement we can mention the paper ([14]), where several examples of groups of galaxies are given, which are expanding, that is the groups are destroying.

3.GROUP OF CONDENSATIONS IN NGC5128. It is well known that Ambartsumian was the first who took attention on the activity of galactic nuclei. Especially interesting are the ejections from the nucleus of NGC5128 (Cen A). The comparable proximity of this galaxy (5Mpc) enables us to observe in optics the condensations, situated in the jet, ejected from the nucleus. As mentioned Ambartsumian ([13]): "it is possible to observe in the nature the ejection from the nucleus of galaxies of relatively small masses. These ejected masses can in a short period of time transform into conglomerates, consisting of young unstable stars, interstellar gas and the clouds of particles with high energy". It is probable that we have such a phenomena in the intermediate ejection from the nucleus of NGC5128. This ejection consists of diffuse matter, compact emission objects and the chains of blue objects, the spectra of last objects are identical with the spectra of B type supergiants ([14,15]). On the distance of 36kpc from the nucleus a group of diffuse emission regions is situated. This group looks like a Trapezium-type system. The difference between the velocities of separate objects in this group is about 800km/s ([16]). Such a high difference of velocities, with the small dimensions of the group, about 6kpc, coud not be originate at the moment of exit of these objects from the nucleus. The origin of the system had to take place near the modern coordinates of this group. For the holding of this group from the dissipation, from the virial theorem a mutual mass of about 5 orders more, than is obtained for this group, is needed.

Byurakan Astrophysical Observatory

Ա. Լ. ԳՅՈՒԼԲՈՒԴԱՂՅԱՆ

Տրապեցիայի տիպի համակարգերի մասին

Հոդվածում դիտարկվում են տրապեցիայի տիպի (սեղանակերպ) համակարգեր, որոնք բաղկացած են տարբեր տիպի օբյեկտներից՝ OB աստղասփյուռների մասը կազմող OB աստղերից, T Ցուլի տիպի աստղերից, NGC 5128 գալակտիկայում գտնվող խիտ միգամա-

ծուքյուններից: Այդ օբյեկտներն ունեն մեկ ընդհանուր հատկություն՝ անկայուն են և քայքայվում են, ինչը համապատասխանում է Վ.Համբարձումյանի կանխատեսմանը:

А. Л. ГЮЛЬБУДАГЯН

О системах типа трапеции Ориона

В статье приводятся примеры систем типа Трапеции, которые представляют разные объекты - звезды типа ОВ в ассоциациях, звезды типа Т Тельца, компактные сгущения в галактике NGC5128. Все эти системы объединяет их нестабильность, о которой в свое время было сказано Амбарцумяном.

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