

Introduction

Editorial board *

NAS RA V. Ambartsumian Byurakan Astrophysical Observatory (BAO)

Scientific collaboration and friendship between Armenian and Georgian astronomers were established since 1930s due to the efforts of *Viktor Ambartsumian* (1908-1996) and *Evgenii Kharadze* (1907-2001). At that time, Ambartsumian was working at Leningrad State University (LSU) and made several visits to the **Abastumani Astrophysical Observatory (AbAO)** founded in 1932 as a scientific adviser. The famous Georgian astronomers *Mikhail Vashakidze* and *Shalva Gordeladze* were Ambartsumian's PhD students at LSU and their significant research contributions culminated in PhD theses in 1936 and 1937, respectively. In 1946, with the founding of the **Byurakan Astrophysical Observatory (BAO)**, Armenian–Georgian scientific collaboration entered a new phase. Many astronomers from both countries worked together and co-authored important publications. Notably, *Lyudwik Mirzoyan* and *Guram Salukvadze* collaborated on studies of stellar associations, flare stars, T Tauri stars, and related topics.



Frequent scientific seminars and mutual visits between astronomers from BAO and AbAO eventually led to the idea of holding regular joint meetings. In 1974, thanks to the initiative of *Viktor Ambartsumian* and *Evgenii Kharadze*, the **Joint Byurakan–Abastumani (Armenian–Georgian) Colloquia** series was launched and continued regularly until the disintegration of the Soviet Union. *Lyudwik Mirzoyan* and *Guram Salukvadze*, who served as Deputy Directors of BAO and AbAO, respectively, played a decisive role in organizing these meetings. Between 1948 and 1990, twelve Georgian astronomers defended their theses in Yerevan and Byurakan, including ten PhD and two Doctoral dissertations. Among them, *Rezo Natsvlishvili*, a PhD student of *Lyudwik Mirzoyan*, defended his thesis in 1988 and spent several years conducting research at BAO. Both *E. K. Kharadze* and later *G. N. Salukvadze* served as members of BAO's Special Council for thesis defenses, and they were also elected to the Editorial Board of the journal **Astrofizika/Astrophysics**. Thanks to the efforts of the current generation of scientists, the colloquium series was revived, and several meetings have been held since 1998. Although these gatherings are no longer held on a regular basis, the spirit of collaboration remains strong. The most recent colloquia (1998, 2003, 2013, and 2023) were dedicated to the anniversaries of *Lyudwik Mirzoyan*.

Between 2008 and 2010, through the initiative of *Areg Mickaelian*, Armenian and Georgian astronomers successfully carried out a joint project under the **International Science and Technology Centre (ISTC)**, aimed at developing the Armenian and Georgian Virtual Observatories (VOs). Subsequently, in

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2015, Armenia was designated as one of the **International Astronomical Union (IAU) Regional Offices of Astronomy for Development (ROAD) of the International Astronomical Union (IAU)**, specifically for the region of South West and Central Asia (SWCA). Georgia was among the first countries to support and join this initiative. During the period 2015-2024, numerous Georgian astronomers and students actively participated in international and regional meetings and schools held in Byurakan.

The XVII Joint Byurakan-Abastumani Colloquium was held on 5-9 May 2025 in Byurakan. Active scientific discussion of the presented tasks will undoubtedly serve as a guarantee of further fruitful cooperation.

This issue of BAO Communications presents the proceedings of the XVII Joint Byurakan–Abastumani Colloquium. All articles included have undergone rigorous peer review.