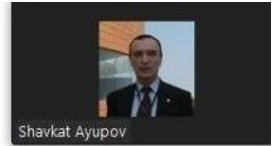


# Ilmiy seminarlar davom etmoqda!

2020-yil 7-sentyabr kuni "Operator algebralari va uning tadbiqlari" nomli ilmiy seminar o'tkazildi. Seminarida "Chains of three-dimensional evolution algebras: A description, behavior of the set of absolute nilpotent and idempotent elements" mavzusida tayanch doktorant A.Imomqulov (Matematika instituti) ma'ruza qildi.



Anvar Imomqulov



Shavkat Ayupov

- (3)  $\mathcal{Id}(E_2^{[s,t]}) =$   
$$\begin{cases} (0, 0, 0), & \text{if } (s, t) \in \{(s, t) \in \mathcal{T} : t \geq a\} \\ \{(0, 0, 0), (1, 1, 1)\}, & \text{if } (s, t) \in \{(s, t) \in \mathcal{T} : s \leq t < a\} \end{cases}$$
- (4)  $\mathcal{Id}(E_3^{[s,t]}) =$   
$$\begin{cases} (0, 0, 0), & \text{if } (s, t) \in \{(s, t) \in \mathcal{T} : F(s, t) = 0\} \\ \left\{ (0, 0, 0), \left( \frac{f_n(t)}{F(s,t)}, \frac{g_n(t)}{F(s,t)}, \frac{h_n(t)}{F(s,t)} \right) \right\}, & \text{if } (s, t) \in \{(s, t) \in \mathcal{T} : F(s, t) \neq 0\} \end{cases}$$
  
where  $F(s, t) = f_1(s)(f_n(t) + \psi(s)(g_n(t))^2 + \varphi(s)(h_n(t))^2)$ .
- (5)  $\mathcal{Id}(E_4^{[s,t]}) =$   
$$\begin{cases} (0, 0, 0), & \text{if } (s, t) \in \{(s, t) \in \mathcal{T} : g(t) = 0\} \\ \left\{ (0, 0, 0), \left( \frac{g(s)}{g(t)}, \frac{g(s)f(t)}{(g(t))^2}, \frac{g(s)\varphi(t)}{(g(t))^2} \right) \right\}, & \text{if } (s, t) \in \{(s, t) \in \mathcal{T} : g(t) \neq 0\} \end{cases}$$
- (6)  $\mathcal{Id}(E_5^{[s,t]}) =$   
$$\begin{cases} \{(0, 0, 0), (1, \psi(t), \varphi(t))\}, & \text{if } (s, t) \in \{(s, t) \in \mathcal{T} : s \leq t < a\}, \\ (0, 0, 0), & \text{if } (s, t) \in \{(s, t) \in \mathcal{T} : t \geq a\}. \end{cases}$$

Ma'ruzada uch o'lchovli evolyutsion algebralarning oilasining barcha zanjirlar tasnifi tahlil qilindi. Ya'ni ma'lum bir tabiiy bazisga mos strukturaviy matritsalarini Kolmogorov-Chapman tenglamasini qanoatlantiruvchi algebralarni qurildi hamda ularning absolyut nilpotent va idempotent elementlari soni haqida ma'lumot berildi.