Семинар Лаборатории Алгебраической геометрии и ее приложений

## 10 сентября 2021 г (пятница) <u>в 17:00</u>

На семинаре выступит



## Фёдор Пакович (Университет Бен-Гуриона в Негеве)

с докладом:

## Commuting rational functions revisited

The classical Ritt theorem states that if rational functions of degree at least two

\$A\$ and \$B\$ commute and do not have an iterate in common, then up to a conjugacy \$A\$ and \$B\$ are either powers, or Chebyshev polynomials, or Latt\`es maps. This result however provides no information about commuting rational functions which {\it do} have a common iterate. On the other hand, non-trivial examples of such functions exist.

One such example was constructed already by Ritt, who concluded his paper by saying: "we think that the example given above makes it conceivable that no great order may reign in this class". In our talk, however, we show that this point of view was too pessimistic, and construct a general theory of commuting rational functions. In particular, we describe a method which permits to describe all rational functions commuting with a given rational function.

## Приглашаются все желающие!