

**Симпозиум 2: «Системная компьютерная биология»**

Секция 2: «Компьютерный анализ и моделирование популяционных, экологических и генетических систем и процессов»

**Symposium 2: “Systems Computational Biology”**

Section 2: “Computational analysis and modeling of population, ecological and genetic systems and processes”

**Устные доклады**

**Oral session**

<b>№</b>	<b>Наименование доклада (тезиса) Abstract title</b>	<b>Докладчик (авторы) Autors</b>	<b>Время на доклад, мин Reporting time, min</b>
1	Modeling bistable dynamics of bacterial restriction-modification systems to understand bacterial defense systems	Marko Djordjevic	20
2	The emergence and evolution of living systems compensating for entropy processes	Alexander Ratushniak Proskura A.L., Shevyrina V.A.	20
3	On the role of natural selection in the genetic divergence of migration-coupled populations: results of mathematical modeling and experiments	Oksana Zhdanova Frisman E.Ya	20
4	Changes in the dynamics of a sex-structured population with non-overlapping generations during evolution	Oksana Revutskaya Neverova G.P., Zhdanova O.L., Frisman E.Y	20
5	Mathematical properties of the agent-based model of extinction-recolonization for population genetics	Gaianov Nikita	20
6	Dynamics of population with consecutive mutation of genotypes	Bratus Alexander, Nepogodin A.V., Samokatov V.P.	20
7	Integrated mathematical modeling, experimental and bioinformatics study of Type-II antitoxin-toxin system's response to antibiotic exposure	Bojana Ilic, Marko Djordjevic, Hong-Yu Ou	20
8	Time series ordination for computational experiments dynamics (TSOCED) with biological models	Alexandra Klimenko Vorobeva D.A., Lashin S.A.	20
9	Demographics of genetic admixture and expansion	Ediev D.M.	20

**Стендовые доклады****Poster session**

<b>№</b>	<b>Наименование доклада (тезиса) Abstract title</b>	<b>Докладчик (авторы) Autors</b>
1	The role of photosynthetic processes in the life of phytoplankton. Mathematical model	Pak Svetlana, Abakumov Alexander
2	Microbial community: defining properties and patterns in dynamics and steady state	Abakumov Alexander, Degermendzhi Andrey
3	Modeling the phenological response of herbaceous plants to climate change in Western Siberia	Fomin Eduard, Fomina Tatiana
4	Application of Machine Learning Methods for Analyzing Genetic Polymorphism in Populations	Maryanovskaya T.A., Shcherbakov D.Yu.
5	Speciation process and genetic diversity formation modeling in closed ecosystems	Bukin Yu.S., Berezhnoi M.D., Sherbakov D.Yu.
6	The development of a tool to analyze biodiversity in the Azov-Black Sea region by merging multidisciplinary information	Kuleshova Olga, Krivenko Olga
7	Democratized Bioinformatics: Enabling accessibility through an integrated platform for drug discovery and multi-omics analysis	Taj Mohammad, Khan S., Hassan