

Science&Progress 2020 Section C

Wednesday 11 Nov, moderators N.N. Resnina, T.N. Mokaev 11:15-13:45

11:15-11:30	Connection test
11:30-11:45	Mikhail Anikushin
	Geometric construction of inertial manifolds for non-autonomous dynamical systems
11:45-12:00	Sadjad Baradari
	Investigation of shape memory effect and superelasticity in the NiCuTiHf and NiCuTiHfZr
	alloys
12:00-12:15	Rashid Bikbaev
	Shape memory effect in the NiTi samples produced by wire-arc additive manufacturing
12:15-12:30	Andrei Boltachev
	On Fredholm boundary problems for the wave equation with conditions on the entire
	boundary
12:30-12:45	Georgii Dzebisashvili
	Analysis of the cylindrical shell's vibrations under cross-section shape transformation
12:45-13:00	Aleksei Ivanov
	Recoverable strain variation during isothermal martensitic transformation in NiTi-based
	shape memory alloys
13:00-13:15	Natalia Izvarina
	Elliptic complexes in relative elliptic theory
13:15-13:30	Alexander Kiryushkin
	Numerical simulation of coupled problem of determining internal ballistics
	characteristics in solid rocket motors
13:30-13:45	Danila Semenov
	Synchronization of the Hindmarsh-Rose neurons via adaptive coupling

15:00-17:15

15:00-15:15	Connection test
15:15-15:30	Pavel Liulchak
	Simulation of Deformation Effects of NiTi Based Shape Memory Alloy by Means of a Phenomenological Macroscopic Level Model
15:30-15:45	Iuliia Zaitceva
	Piloted control: preventing unfavorable pilot-vehicle interactions
15:45-16:00	Elizaveta Akimova
	Analysis of global stability and oscillations in discontinuous
	control systems
16:00-16:15	Fenja Drauschke
	Effect of Topology upon Relay Synchronization in Triplex Neuronal Networks
16:15-16:30	Iuliia Raznoglazova
	Synchronization control and bifurcation of coupled two-dimensional Hindmarsh-Rose
	systems
16:30-16:45	Konstantin Zhuikov
	Eta-invariant for elliptic operators on a manifold with cylindrical ends
16:45-17:00	Alexander Khomkolov
	Global stability and dissipativity in fractional Lorenz systems
17:00-17:15	Alisa Krylova
	Deformation of shallow spherical caps under internal pressure



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Thursday 12 Nov 9:45-11:15

9:45-10:00	Connection test
10:00-10:15	Mikhail Lobachev
	The lock-in range of a type 2 analog PLL
10:15-10:30	Mariya Bushmakova
	Machine learning algorithms for evaluation of relaxation terms in state-to-state kinetic
	equations
10:30-10:45	Artur Gabrielyan
	Strain variation during isothermal holding of the Ni51Ti49 shape memory alloy under
10:45-11:00	Uliana Karaseva
	Influence of heat treatment on the mechanical behavior under compression of NiTi alloy
	produced by wire arc additive manufacturing
11:00-11:15	Vladimir Kiriyanov
	Predicting COVID-19 spreading in Russia based on a learning mathematical model of
	epidemic
11:15-11:30	Break

11:30-12:30

11:30-11:45	Anastasia Kozlova On classical connections in analytic mechanics
11:45-12:00	Elvira Salakhova Oscillations in the neuroendocrine system: An event-based regulation model
12:00-12:15	Sergey Bondarenko Modeling and calculation of kinematic diagrams of mechanisms of robotic systems for pipeline diagnostic
12:15-12:30	Timofey Rebrov, Chernysheva Tatiana Deformation tensor for BCC-HCP martensitic transformation in TiZr shape memory alloy