

1st day, 01.07 (NSU, room 3122)

9:00 - 9:30	Registration	
9:30 - 9:45	Opening of the conference	
9:45 - 10:15	ILSA schemes for modeling multi-scale processes in hydraulic fracture propagation: a trajectory of research	Peirce A.
10:15 - 10:45	Modeling geometry of planar hydraulic fractures using the Planar 3D ILSA model	Valov A., Dontsov E., Baykin A.
10:45 - 11:15	Scaling of the Planar3D problem into the multilayered media for practical applications	Shel E.
11:15 - 11:35	Coffee-break	
11:35 - 12:05	Simulation of near-wellbore fracture reorientation using fully 3D model of hydraulic fracture	Lapin V.
12:05 - 12:35	Hydraulic Fracturing Modeling with Discrete Element Method: The Good, The Bad, and The Ugly	Zhang F.
12:35 - 12:50	Photo	
12:50 - 14:10	Lunch	
14:10 - 14:40	Impact of Geomechanics on Fracture Flowback	Osipov A.A., Boronin S.A., Garagash I.A., Tolmacheva K.I., Paderin G.V., Lezhnev K.E.
14:40 - 15:10	Numerical models for hydraulic refracturing	Bratov V., Martemyanov A.
15:10 - 15:40	Using a Planar3D Simulator for modelling hydrofracturing on Rosneft oil fields	Aksakov A.V. , Borshuk O.S., Makeev G.A.
15:40 - 16:00	Coffee-break	
16:00 - 16:30	Modern C++ approaches to FEM modelling	Gurin A.
16:30 - 17:00	Poroelastic Effects Influence Range for Radial Hydraulic Fracturing Model	Baykin A.N.
17:00 - 17:30	Fracture closure pressure evolution prediction in water-injection wells using hydrogeomechanical modeling	Bazyrov I.S., Lukin S.V.
17:30 - 21:00	Ice-breaker	

2nd day, 02.07 (NSU, room 3122)

9:30 - 10:00	TBA	Detournay E.
10:00 - 10:30	The near-tip region of a hydraulic fracture with pressure-dependent leak-off and leak-in	Kanin E.A., Garagash D.I., Osiptsov A.A.
10:30 - 11:00	Incorporating tangential traction into models of hydraulic fracture: effect on fracture growth, redirection, plasticity, fluid rheology and computational performance	Mishuris G., Papanastasiou P., Peck D., Piccolroaz A., Wrobel M.
11:00 - 11:20	Coffee-break	
11:20 - 11:50	A P3D model for fracture growth across multiple elastic layers	Zhang X.
11:50 - 12:20	Accounting for the layered elastic strata in the Planar 3D model	Markov N.S.
12:20 - 12:50	Abstract-Numerical investigation of the interaction between hydraulic fractures and natural fractures in porous media based on an enriched FEM	Zhou Y., Yang D., Zhang X., Chen W.
12:50 - 14:10	Lunch	
14:10 - 14:40	Effects of dense granular suspension rheology and dynamic bridging on proppant transport in hydraulic fractures	Boronin S.A., Dontsov E.V., Derbyshev D.Yu., Garagash I.A., Osiptsov A.A.
14:40 - 15:10	Boycott effect in two-dimensional sedimentation with diffusion	Neverov V.V., Shelukhin V.V.
15:10 - 15:40	Direct simulation of proppant transport in hydraulic fractures based on the immersed boundary method	Kuranakov D.S., Esipov D.V., Lapin V.N., Chirkov D.V.
15:40 - 16:00	Coffee-break	
16:00 - 16:30	Modelling slurry flow in a hydraulic fracture: from mathematical model to deployable software	Kovtunenکو P., Baykin A., Skopintsev A., Ermishina V.
16:30 - 17:00	The coupling of an enhanced pseudo-3D model for hydraulic fracturing with a proppant transport model	Skopintsev A., Dontsov E., Baykin A., Kovtunenکو P.
17:00 - 17:30	Proppant quality control as a key factor for fracture future	Tkachenko, A., Vorontsov, V., Pavlov, N.
17:30 - 19:00	Visit to NSU observation dome	

3rd day 03.07 (Lavraentyev Institute of Hydrodynamics, room 108)

9:30 - 10:00	Presentation of Lavrentyev Institute of Hydrodynamics	Ermanyuk E.V.
10:00 - 10:30	Laboratory study of hydraulic fracturing influenced by stress change	Turuntaev S.B., Zenchenko E.V., Trimonova M.A., Zenchenko P.E., Baryshnikov N.A.
10:30 - 11:00	Hydraulic fracturing of concrete cylinders in an non-uniform stress field	Blinov V.A., Legan M.A., Novoselov A.N.
11:00 - 11:20	Coffee-break	
11:20 - 11:50	Foam flow in a Hele-Shaw cell with a local constriction	Ermanyuk E.V., Shmakova N.D., Penkovskaya N.A., Santucci S.F.
11:50 - 12:20	Rheological Properties and Stress-Dependent Permeability of Reservoir Rock: Theory and Experiment	Nazarova L., Nazarov L.
12:20 - 12:50	Experimental study of the granules flow through a local narrowing	Kutlimetov A
12:50 - 14:30	Lunch	
14:30 - 17:30	Scientific Excursion around Lavrentyev Institute of Hydrodynamics	
17:30 - 22:00	Banquet	

4th day 04.07 (NSU, room 3122)

9:30 - 10:00	Ultra-fast hydraulic fracturing model for multi-well simulations	Dontsov E.V.
10:00 - 10:30	Comparison of metamodel and planar fracture model	Zavialova N., Perepechkin I., Bikov A., Polnikov E.
10:30 - 11:00	Comparison of design optimization algorithms of multiply fractured well	Kavunnikova E.A., Starovoitova B.N.
11:00 - 11:20	Coffee-break	
11:20 - 11:50	Geomechanic modelling of rock failure accounting for seismic emission and its comparison to seismic moment-tensor model	Duchkov A.A., Stefanov Y.P., Loginov G.N., Yaskevich S.V.
11:50 - 12:20	Investigations of seismic emission and shut-in pressure behavior during micro-hydraulic fracturing of plexiglass	Patutin A.V., Rybalkin L.A., Serdyukov S.V
12:20 - 12:50	Induced Seismicity and Casing Deformation Caused by Hydraulic Fracturing: An Overview in Sichuan Basin, Southwest China	Zhang F.
12:50 - 14:10	Lunch	
14:10 - 14:40	Sensitivity of the pressure decline curve during the minifrac to the properties of poroelastic medium	Baykin A.N., Golovin S.V., Lgotina E.V.
14:40 - 15:10	Rheology and microstructure of two-phase granular fluids: applications to the bridging problem	Shelukhin V.
15:10 - 15:40	Mathematical modeling of fluid migration through impermeable layers along fractures of auto-fracturing	Aksakov A.V., Baikov V.A., Borschuk O.S., Konovalova S.I.
15:40 - 16:10	Determination of the hydraulic fracturing initiation pressure for different types of the well completion	Latyshev A.A., Golovin S.V., Khe A.K.
16:10 - 16:40	Coffe-break	
16:40 - 21:00	Cultural program	

5th day 05.07 (NSU , room 3122)

9:30 - 10:00	Hydraulic fracturing in mining. Protection of a degassing well in a coal seam from air infiltration through the rock mass	Azarov A.V., Patutin A.V., Shilova T.V., Serdyukov S.V
10:00 - 10:30	Reconstruct rock mass stress state of the Upper Kama potassium salts deposit by solving inverse problems using full-scale	Skulkin A.A., Panov A.V., Leontiev A.V.
10:30 - 11:00	Water Hammer Signatures in Well Dynamics	Liapidevskii V.Yu., Neverov V.V.
11:00 - 11:30	Coffee-break	
11:20 - 12:50	General discussion	
12:20 - 14:00	Lunch	
14:00 - 17:00	Visit to Academpark	
17:00 - 20:00	Closing dinner	