

# TOPICS

nanomechanics

molecular and particle dynamics

biomechanics and mechanobiology

phase transitions

computational mechanics

wave motion

nonlinear dynamics, chaos and vibrations

dynamics of rigid bodies  
and multibody dynamics

solids and structures

fluid and gas

mechanical and civil engineering  
applications

aerospace mechanics

mechanics of media  
with microstructure

micropolar media

position sensors

geomedia

plasticity

# IMPORTANT DATES

- February 15, 2019  
**Abstract submission**
- March 15, 2019  
**Notification of acceptance**
- April 1, 2019  
**Paper submission**
- June 24 – 29, 2019  
**APM 2019 Conference**

**We are looking  
forward to your  
participation in  
our conference!**

*The APM 2019 is organized by:  
Institute for Problems in Mechanical Engineering  
of Russian Academy of Sciences (IPME RAS)  
Peter the Great St. Petersburg Polytechnic  
University (SPbPU)*

Please refer to the following website for further details about the conference

**[www.apm-conf.spb.ru](http://www.apm-conf.spb.ru)**



**ADVANCED PROBLEMS IN MECHANICS**



**XLVII INTERNATIONAL SUMMER  
SCHOOL-CONFERENCE**

**Saint Petersburg | Russia  
24-29 June 2019**

*Dedicated to the 120th anniversary of  
Peter the Great St. Petersburg Polytechnic University*



Russian Academy of Sciences  
Peter the Great St. Petersburg Polytechnic University  
Institute for Problems in Mechanical Engineering of  
Russian Academy of Sciences  
Federal Agency of Scientific Organizations

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June  
24 – 29  
2019

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**M. V. Zakrzhevsky** (Riga Technical University, Latvia)

## The Advanced Problems in Mechanics 2019 International Summer School-Conference

is the forty seventh in a series of annual summer schools held under the patronage of Russian Academy of Sciences. The Conference is organized by Institute for Problems in Mechanical Engineering of Russian Academy of Sciences (IPME RAS) and Peter the Great St. Petersburg Polytechnic University. The main purpose of the meeting is to gather specialists from different branches of mechanics to provide a platform for cross-fertilisation of ideas. The list of problems under investigation is not limited to questions of mechanical engineering, but includes practically all advanced problems in mechanics. The main attention is given to problems on the boundary between mechanics and other research areas, which stimulates research in such domains as micro- and nanomechanics, material science, physics of solid state, molecular physics, astrophysics and many others.



## Conference venue

The conference is held at Peter the Great Saint-Petersburg Polytechnic University, which holds the leading position in the rating of Russian engineering higher educational institutions. St. Petersburg is called the “Venice of the North”, since it is located among numerous rivers and canals of the delta of the Neva river. St. Petersburg is also referred to as the “cultural capital” of Russia. The magnificent Hermitage and Russian Museum possess the unique collection of masterpieces from both all over the world and Russia. The famous Russian ballet is on offer in numerous theatres. For those more inclined towards nature, the Russian czars' residences, for example Pavlovsk, Peterhoff and Pushkin, can offer a pleasant visit. Alternatively one can just enjoy a walk during the day or famous white nights - St. Petersburg is an open-air museum, which calls for its explorers.

Welcome to Saint Petersburg!