Welcome Message

The 12th International Symposium on Linear Drives for Industry Applications (LDIA) will be held from July 1-3, 2019 in Neuchâtel, Switzerland. The goal of the symposium is to bring together researchers from both academia and industry, and to share research findings and discuss future developments in linear drive technology.

Venue

The symposium will be held at the Microcity center for innovation of the Swiss Federal Institute of Technology (EPFL) in Neuchâtel, Switzerland. Located on a beautiful lake, accessible by train from the Geneva (1.5 hours) or Zurich airports (2 hours), Neuchâtel is both a charming historic city and the heart of microtechnology and mechatronics industries in Switzerland.

Information for Authors

December 1st, 2018 Submission of abstracts
March 1st, 2019 Notification of acceptance
May 1st, 2019 Submission of full papers

Authors are invited to submit an A4 single-page abstract through the conference website. After the conference, authors of selected papers will be invited to resubmit their work to the EPE Journal. All accepted papers will be indexed in IEEE’s Xplore Digital Library.

Preliminary Program

July 1st, 2019 Registration, Welcome party
July 2nd, 2019 Opening ceremony, Plenary lectures, Technical sessions, Banquet
July 3rd, 2019 Technical sessions, closing remarks
July 4th, 2019 Technical tour

Organizing Committee
Chairman:
Prof. Yves Perriard, EPFL
Neuchâtel, Switzerland

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International Steering Committee

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Topics

**Trends and new developments of linear drives (survey)**

**Electromagnetic linear motors and actuators**
- Linear motors
- Linear actuators
- Tubular Motors
- Nano-, micro-actuators
- Multi-dimensional linear and planar drives

**Non-electromagnetic linear motors and actuators**
- Linear motors
- Linear actuators
- Nano-, micro-actuators
- Multi-dimensional linear and planar drives
- Bio-actuators
- Piezo electric actuators

**Control methods for linear drives**
- Linear drive and motor control
- Control theory
- Applications of new control theory
- Modeling and identification

**Levitation technologies**
- Magnetic levitation for linear drives
- Magnetic suspensions for motors
- Electrodynamic levitation
- Control strategies
- Novel levitation control schemes

**Subsystems for linear drives**
- Bearings
- Power sources and power conversion
- Sensors and measurement systems

**Applications of linear drives and levitation technologies**
- Transportation
- Factory automation and machine tools
- Office automation
- Robotics
- Home and medical applications

**Analysis of electromagnetic fields and force fields**
- Numerical analysis
- Analysis of coupled systems
- Visualization
- Dynamics
- EMC

**Materials**
- Permanent magnets
- Superconductors
- Piezo devices
- Magnetic materials
- Special design of force elements

**Other related topics and new technologies**