

# INTERNATIONAL GEAR CONFERENCE

**27<sup>th</sup>-29<sup>th</sup> August 2018**

Lyon Villeurbanne  
FRANCE

## 1<sup>st</sup> CALL FOR PAPERS

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## CALL FOR PAPERS

Although gears are considered as some of the oldest machine elements, 21<sup>st</sup> century industry is becoming ever more dependent on mechanical transmissions due to increasing competitive pressure and more stringent environmental regulations. As a result, current industrial needs are centred on higher power to weight ratios, robustness, power loss reductions and improved noise and vibration behaviour.

In the continuity of the highly successful International Gear Conference held in Lyon in 2014, this upcoming event aims to provide a forum for the most recent advances in modern mechanical transmissions in the context of emerging applications such as wind turbines, hybrid/electric car transmissions and jet engines, to name but a few.

To this end, authors are invited to submit original research articles which stimulate the continuing efforts to understand and improve the behaviour of mechanical transmissions. Papers are solicited on all aspects of gear and power transmission technology regardless of application.

The organising committee is particularly interested in topical issues in the following (non-exclusive) research areas:

- Gear noise and vibration, experiments and simulations.
- New gear design.
- New manufacturing techniques.
- Design and simulation methods for gear transmissions.
- Gear materials, heat treatments, coatings.
- Power losses and efficiency in gearboxes, low-loss gears, minimum lubrication.
- All relevant failure modes in gears and rolling-element bearings such as pitting, micro-pitting, scuffing, bending fatigue, etc.
- Plastic gears
- New lubricants, additives and lubrication methods.
- Interactions between tribological and dynamic behaviour; modelling of damping.
- Mechanical components: belts, chains, bearings, seals
- Testing - Development of specific test rigs and/or new test procedures.

Prospective authors planning to present a paper at the International Gear Conference are invited to submit a 400 word abstract by 1st September 2017 using the conference website at <http://int-gear-conf18.sciencesconf.org>.

All submissions must be either Microsoft word documents (DOC, DOCX) or Portable Document Files (PDF). The abstracts will be reviewed by the Organising Committee and notifications will be sent to the authors by 31<sup>st</sup> December 2017. Final manuscripts should be written using the templates available at <http://int-gear-conf18.sciencesconf.org> and uploaded on the conference website by 30<sup>th</sup> April 2018.

The accepted papers will be published in the Conference Proceedings provided to all attendees. Extended versions of selected conference papers may be submitted for publication in a Special Issue of the *Journal of Mechanical Engineering Science [Proc. IMechE, Part C]* subject to standard peer-review procedure.

English is the official language of the conference

## ORGANISING COMMITTEE

### NATIONAL COMMITTEE

Samuel BECQUERELLE	SAFRAN Transmission Systems
Jérôme BRUYERE	INSA Lyon - LaMCoS
Jérôme CAVORET	INSA Lyon - LaMCoS
Christophe CHANGENET	ECAM Lyon
Jean-Pierre DE VAUJANY	INSA Lyon - LaMCoS
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Lionel MANIN	INSA Lyon - LaMCoS
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Emmanuel RIGAUD	ECL-LTDS
Philippe VELEX	INSA Lyon - LaMCoS Conference Chair
Fabrice VILLE	INSA Lyon - LaMCoS



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DES SCIENCES  
APPLIQUÉES  
LYON



**ECAM**  
GRAND ÉCOLE OF ENGINEERING  
Lyon

**ÉCOLE  
CENTRALE LYON**

## INTERNATIONAL COMMITTEE

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Stephanos THEODOSSIADES	<i>Loughborough University (UK)</i>
Fernando VIADERO	<i>University of Cantabria (Spain)</i>

## LOCATION

With 1.2 million inhabitants, Lyon is the capital city of the *Auvergne Rhone Alpes* region and the second largest city in France after Paris. In 1998, Lyon received the UNESCO World Heritage Award on the strength of the continuity of its urban settlement over more than two millennia, from Roman times to the present day. The city still retains its distinctive Renaissance feel.

Lyon today is one of the most attractive cities in Europe, home to renowned international companies and major decision centres. It is also a gateway to the rest of the world with its international airport (St Exupery) and the high-speed [2-hour] TGV train connection to the centre of Paris and Charles-de-Gaulle airport.

For many years, Lyon has also been recognised as the gastronomic capital of France and the world with some internationally famous restaurants as well as more modest but excellent 'bouchons', traditional family-run eateries serving delicious home-made fare.

Lyon is also the French centre of academic research on gearing with INSA Lyon, ECAM Lyon and ECL, Engineering Universities ["Grandes Ecoles"], the INSA-ECAM-SAFRAN Chair on Innovative Mechanical Transmissions in Aeronautics, the CETIM-INSA and ECL-VIBRATEC joint laboratories on mechanical transmissions, Ingénierie@Lyon CARNOT Institute, etc. which are sponsoring this International Gear Conference.

## CONFERENCE DATES

**From 27<sup>th</sup> to 29<sup>th</sup> August, 2018.**

## CONFERENCE VENUE

The conference will be held at the conference centre « **Espace Tête d'Or** » which is located 103 Boulevard Stalingrad, Lyon-Villeurbanne, near the Parc de la Tête d'Or and only 1 km from INSA Lyon.

## CONFERENCE FEES

Early registration [before 1 <sup>st</sup> May 2018]	600 €
Registration after 1 <sup>st</sup> May 2018	700 €
Reduced rate for Doctoral Students	450 €

The conference fees include the proceedings, 3 buffet lunches plus refreshments at the conference venue and the Gala Dinner at the world-famous restaurant Bocuse on the evening of Tuesday 28<sup>th</sup>.

*Those accompanying attendees may register for the Gala Dinner only at a cost of 120 € before 15<sup>th</sup> July 2018.*

## CONFERENCE WEBSITE

Further information concerning travel arrangements, accommodation, paper submission etc , may be found on the conference website at:

<http://int-gear-conf18.sciencesconf.org>

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