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## LMS GVT Master Class Europe

September 13-16, 2016  
Sint-Truiden, Belgium

[siemens.com/plm/lms](http://siemens.com/plm/lms)



### Participation fee and registration

The participation fee for the 4-day LMS GVT Master Class Europe is € 2.000+VAT. It includes refreshments, lunch and training material. The number of participants is limited.

Register  
here



### Register here

[www.plm.automation.siemens.com/en\\_gb/campaigns/single\\_topic.cfm?Component=246477&ComponentTemplate=186312](http://www.plm.automation.siemens.com/en_gb/campaigns/single_topic.cfm?Component=246477&ComponentTemplate=186312)

The 4-day LMS Ground Vibration Testing (GVT) Master Class Europe will cover in detail the challenges and modern solutions for dynamic testing of full aircraft structures.

The master class rolls out an integrated approach to handle the test preparation, modal testing, modal analysis, numerical model correlation, model updating and model exploitation. All attendees will participate in an actual full scale GVT on a grounded aircraft.

### We are pleased to welcome following external speakers:

- Professor Jan Wright, Emeritus Professor at the school of Mechanical, Aerospace and Civil Engineering, University of Manchester, UK will be present during the full master class sharing his life experience on structural dynamics testing in aviation through coaching and presentations.
- Professor Gaetan Kerschen, Professor of Aerospace Engineering and Head of the Space Structures and Systems Laboratory, University of Liège, will present the impact of nonlinearities on engineering structures: theory and best practices.

### Topics covered include:

- Structural dynamics: theory and specific challenges of GVT on small, medium and large aircrafts
- Test preparation and de-risking
- Instrumentation of the aircraft
- Measurement set up validation
- Phase separation (random, stepped, swept sine excitations)
- Phase resonance techniques (normal modes testing)
- Modal analysis
- Finite element correlation and updating

# LMS GVT Master Class Europe



## Venue

Campus Saffraanberg  
Koninklijke School voor Onderofficieren  
Kwartier Kolonel Vlieger Renson  
Luikersteenweg 371  
3800 Sint-Truiden  
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## Contact

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## What will the attendee learn?

- Learn how to run large scale structural dynamics tests and obtain validated modal models for conclusive certification dossiers.
- Learn how to efficiently apply the full range of modal testing and identification techniques to obtain an in-depth knowledge of the structural dynamics.
- Experience the value of hybrid test/CAE technology that enables high interaction between test and simulation departments.
- During the course, we also cover the basics of finite element model updating, non-linear system identification, flutter testing, limit cycle oscillation and structural mode interaction testing

## References

Siemens PLM Software has worked extensively with aircraft and spacecraft manufacturers from all over the world. We developed a unique approach combining virtual simulation and physical testing to accelerate and optimize the full testing cycle - from test preparation and modal testing to modal analysis, numerical model correlation and model updating.

References for LMS ground vibration and modal survey testing include AgustaWestland, Airbus Defense and Space, Bombardier, Cessna, DLR, Energia RKK, HAL, Honda Aircraft Company, KARI, Lockheed Martin, Mitsubishi Aircraft Corp, NAL (India), Onera, SAAB, Sikorsky, Sukhoi Civil Aircraft, Tsagi, Tupolev amongst other.

## About Campus Saffraanberg

Campus Saffraanberg is a military personnel training school located in Sint-Truiden, Belgium at about 50km from Brussels. It hosts the Air Training Center which organizes and delivers professional technical training about the preparation and maintenance of flying material from the Belgian army. Campus Saffraanberg will host the LMS GVT Master Class within its premises with dedicated training facilities and grounded aircraft that will be used as test item for a full scale GVT.

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