



No. 6 of March 16<sup>st</sup>, 2018

Hello,

This is the next InfoMail of INTES with new and interesting information about the company, our CAE software PERMAS, our events and services.

We have prepared the following content:

1. PERMAS Users' Conference on April 12<sup>th</sup> to 13<sup>th</sup>, 2018.
2. Schedule of next Standard PERMAS Workshops.
3. Comparison of experimental modal analysis (EMA) with dynamic eigenvalue analysis.
4. Shape optimization of wheel spokes to survive wheel impact test.
5. INTES will attend other events.

Best regards

The INTES Team

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### 1. PERMAS Users' Conference on April 12th to 13th, 2018



You are cordially invited to attend the forthcoming PERMAS Users' Conference in Stuttgart on April 12-13, 2018. There will be an exciting program of user presentations and an introduction to the new developments of next PERMAS Version 17. As usual, sufficient time will be allocated to exchange experiences with other users and to discuss your points of interest with developers of PERMAS. An accompanying exhibition will also be organized.

Use this opportunity to get information on up-to-date applications and software developments. It is hoped that we will see an informative user meeting in Stuttgart.

Up-to-date information on the conference can be found using [this link](#).

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### 2. Schedule of Next Standard PERMAS Workshops (in German)



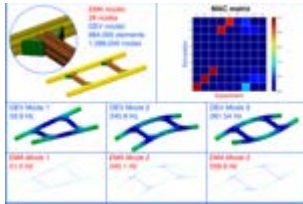
English workshops are available on request.

- |         |           |                           |
|---------|-----------|---------------------------|
| 19 - 20 | Mar. 2018 | Dynamic analysis          |
| 21      | Mar. 2018 | Fluid/structure acoustics |
| 23 - 24 | Apr. 2018 | Engine analysis           |

[Website](#) , [Program](#) , [Calendar](#) , [Registration](#) .

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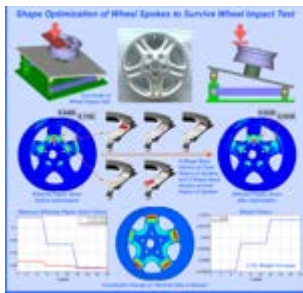
### 3. Comparison of experimental modal analysis (EMA) with dynamic eigenvalue analysis



For structures under dynamic loads, simulations and experiments are frequently used side by side. This leads to mutual benefits. On the one hand, simulation provides a means to identify preferred points to measure. On the other hand, experimental results can be used to identify differences between experimental and simulation model, which provide a basis for model updating to fit the test results by simulation.

[... read more](#)

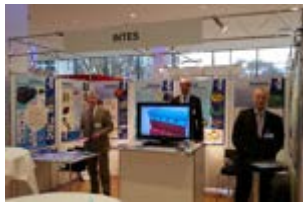
### 4. Shape optimization of wheel spokes to survive wheel impact test



For the homologation of alloy wheels, a number of standard tests have to be performed before such wheels are allowed to be used in cars. Such tests are bending fatigue test, radial fatigue test, and impact test. The latter test represents the inclined collision of a wheel and a curb at low speed, where the spokes are not allowed to crack. To pass this test at the first time successfully, previous numerical simulation and optimization can avoid late re-design and late start of production.

[... read more](#)

### 5. INTES will attend other events



- 17 - 18 Apr. 2018 Automotive CAE Grand Challenge in Hanau, Germany
- 18 - 20 Apr. 2018 FAN2018 (International Conference on Fan Noise, Aerodynamics, Applications and Systems) in Darmstadt, Germany
- 14 - 16 May 2018 NAFEMS Regional Conference DACH in Bamberg, Germany
- 5 - 7 June 2018 CAASE18 conference of NAFEMS Americas in Cleveland, OH, USA
- 20 - 21 Nov. 2018 VDI congress "SIMVEC - Simulation und Erprobung in der Fahrzeugentwicklung" in Baden-Baden, Germany

[Overview on other events](#)