K.U.Leuven University

Noise & Vibration Group

Belgium

Bert Pluymers

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bert.pluymers@mech.kuleuven.be

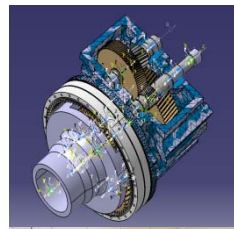
- Contact person
  - Dr.ir. Bert Pluymers
  - Industrial research manager
  - Noise & Vibration Research Group of the K.U.Leuven
    - Staff of 60 professors, doctoral and post-doctoral researchers
    - Department of Mechanical Engineering – Division of Production engineering, Machine design and Automation (PMA)
    - http://www.mech.kuleuven.be/mod

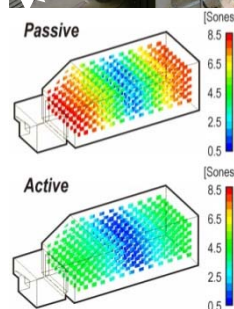
Celestijnenlaan 300B – box 2420,
3001 Heverlee, Belgium
Tel: +32 16 32 25 29
Fax: +32 16 32 29 87
bert.pluymers@mech.kuleuven.be

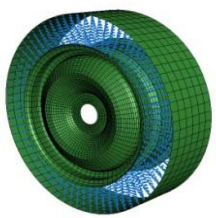
Electromobility+

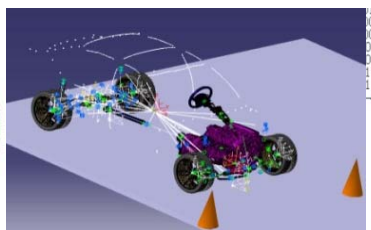
- Key dimension KD 5: Technology based innovation

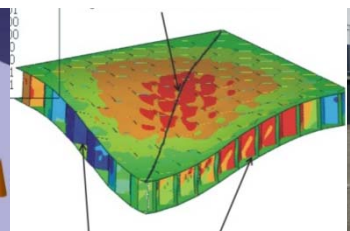
- Expertise
  - *Identification and analysis of **dynamic systems***
  - ***Active** noise and vibration **control***
  - ***Numerical modelling** (vibro-acoustics, structural dynamics, aero-acoustics, multi-body, mechatronics, material)*
  - *Intelligent **lightweight** structures*











Electromobility+

- Unique infrastructure
  - *High dynamic **6-dof shaker** table*
  - *Open **wind tunnel** & **confined flow** test setup*
  - *Vibro-acoustic **lightweight panel** test-suite*
  - *Tire dynamics test-rigs*
- Involvement in previous/ongoing projects
  - *Vast expertise with EU projects in mobility from a **vehicle technology** perspective*
  - *Experience with **collaborative** and **people** (Marie Curie) projects*
  - *http://www.mech.kuleuven.be/mod/projects*

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ongoing

* coordinator

Acronym	FP	Type of Project	Description	Topic
AETHER	6	Marie Curie	Aero-acoustical and thermo-acoustical coupling in energy processes	Aero-acoustics
CANTOR	6	Network	Coordinating noise transportation research and engineering solutions	Noise
EDSVS	6	Marie Curie	Doctoral training programme on sound and vibration	Noise and vibration
INMAR	6	Project	Intelligent materials for active noise reduction	Materials
MADUSE*	6	Marie Curie	Modelling Product Variability and Data Uncertainty in Structural Dynamics Engineering	Uncertainty
SIM-VIA2	6	Marie Curie	Advanced and New Simulation Methods in Vehicle Vibro-acoustics	Vibro-acoustics
Smart Structures CAE*	6	Marie Curie	A computer aided engineering approach to smart structures design	Active systems, simulation
MID-FREQUENCY*	7	Marie Curie	CAE Methodologies for Mid-Frequency Analysis in Vibration and Acoustics	Noise and vibration
MID-MOD	7	Project	Mid-frequency vibro-acoustic modelling tools	Noise and vibration
VECOM	7	Marie Curie	Vehicle Concept Modelling	Concept, simulation
EXPLICA*	7	Marie Curie	Exhaust Pipe noise radiation Modelling by Innovative Computational Aeroacoustics	Aero-acoustics
EMBOCON	7	Project	Embedded Optimization for Resource Constrained Platforms	optimization, control
ESTOMAD	7	Project	Energy Software Tools for Sustainable Machine Design	multiphysics modelling
SUPERPANELS	7	Marie Curie	Strengthening and Upholding the Performances of the new Engineered Research Panels	Lightweight and smart structures
TIRE-DYN*	7	Marie Curie	Experimental and Numerical Analyses of the Dynamic Behaviour of Rolling Tires in order to Improve the Tire Modeling Accuracy	Dynamics, numerical modelling