



# FP7/H2020 ITN (ETN/EJD/EID) projects – a testimony

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# Who are we



- KU Leuven
  - Department of Mechanical Engineering
    - Division of Production engineering, Machine design and Automation (PMA)
      - Noise and Vibration Research Group (MOD) → Dynamics of Mecha(tro)nic Systems

## Research staff

- 6 academic (Wim Desmet)
- 1 industrial research manager (Bert Pluymers)
- 11 postdoctoral researchers
- 73 PhD incl. 26 industrial PhD res.



- Part of the Strategic Research Centre for Smart Manufacturing (Flanders Make) – leading Core Lab *Dynamics of Mechanical and Mechatronic Systems (DMMS)*



- Active in European Automotive research (24 FP7 & so far 7 H2020 projects – 9 as coord.)  
<http://www.mech.kuleuven.be/en/research/mod/Projects>



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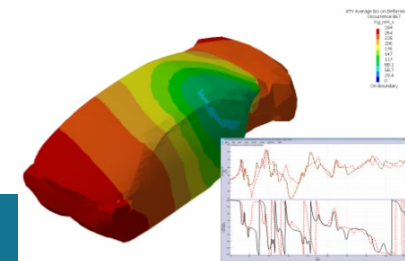
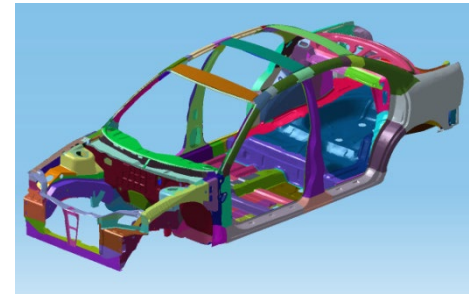
# On-going Marie S. Curie projects

- › EU H2020 Marie Skłodowska Curie European Training Network (ETN), [PBNv2: Next generation Pass-By Noise approaches for new powertrain vehicles](#) (coordinator)
- › EU H2020 Marie Skłodowska Curie European Training Network (ETN), [SmartAnswer: Smart mitigation of flow-induced acoustic radiation and transmission for reduced aircraft, surface transport, workplaces and wind energy noise](#)
- › EU H2020 Marie Skłodowska Curie European Training Network (ETN), [Acoutect: A sound fundament for our future buildings](#)
- › EU H2020 Coordination and Support Action (CSA), [Science2Society: Improving university, industry and society interfaces to boost the throughput capacity of Europe's innovation stakeholders](#) (coordinator)
- › COST Action, CA15125, [DENORMS: Designs for Noise Reducing Materials and Structures](#)
- › EU H2020 Marie Skłodowska Curie European Joint Doctorate (EJD), [VIPER: Vibroacoustics of Periodic media](#)
- › EU H2020 Marie Skłodowska Curie European Training Network (ETN), [ITEAM: Interdisciplinary Training Network in Multi-Actuated Ground Vehicles](#)
- › EU H2020 Marie Skłodowska Curie European Training Network (ETN), [SSeMID: Stability and Sensitivity Methods for Industrial Design](#)
- › EU FP7 Marie Curie Initial Training Network (ITN), [ANTARES: Advanced Training and Research in Energy Efficient Smart Structures](#) (coordinator)

- 23 FP7/H2020 MSCA projects
  - 15 I(E)TN (3 as coordinator)
  - 1 EJD
  - 1 EID (1 as coordinator)
  - 3 IAPP (1 as coordinator)
  - 2 IEF
  - 1 IRSES
- All in the core research domains
- All with known and trusted partners
- For a full list of ongoing and past projects:  
<http://www.mech.kuleuven.be/en/pma/research/mod/projects>

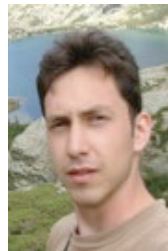
# FP7 ITN MID-FREQUENCY

- **FP7 ITN MID-FREQUENCY** (no. 214909), 01/10/2008 – 31/09/2012
- **Main Topic:** Mid-frequency vibro-acoustic simulation tools
  - Development of enhanced mid-frequency simulation methods
  - Benchmarking on academic and semi-industrial cases
  - Validation on industrial automotive and aerospace applications
- **Website:** <http://www.midfrequency.org>
- **Project Partners:** (12 beneficiaries – 8 countries)
  - Universities: K.U.Leuven (coord.: Wim Desmet, Bert Pluymers), ENSCachan, Univ. Cambridge, ECL, INSA Lyon, KTH, SAPIENZA Rome, ISVR
  - R&D Institutes: ViF
  - Industrial partners: EADS Astrium ST, LMS, Daimler

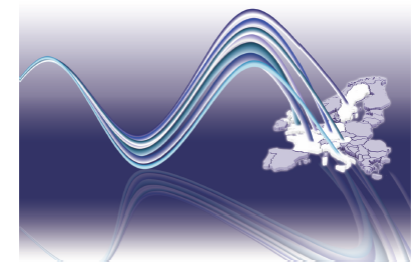


# FP7 ITN MID-FREQUENCY

- Recruited 19 ESR's and 4 ER's
  - 15 different nationalities (Brazilian(2), Chinese, Colombian, Czech, Egyptian, French(2), German, Greek, Indian, Italian(6), Romanian, South Korean, Spanish, Tunisian, Turkish)



**"MID-FREQUENCY"**  
CAE Methodologies for  
Mid-Frequency Analysis in  
Vibration and Acoustics



A European FP7 Marie Curie Initial Training Network (ITN) Grant Agreement – 214909  
Duration: October 1st, 2008 - September 30, 2012  
Coordination: KU Leuven  
Partners: KU Leuven (BE), ENS Cachan (FR), Cambridge University (UK), EADS Astrium ST (FR), Ecole Centrale de Lyon (FR), INSA Lyon (FR), KTH Stockholm (SE), LMS International (BE), Università Degli Studi Di Roma La Sapienza (IT), Daimler AG (DE), ISVR Southampton (UK), Virtual Vehicle Competence Centre (AT)

Wim Desmet, Bert Pluyms, Onur Atak

# H2020 EJD VIPER

- **H2020 EJD VIPER** (no. 675441), 01/01/2016 – 31/12/2019
- **Main Topic:** European Joint Doctorate network focused on research in Vibroacoustic of PERiodic media
- **Website:** <http://viper.ec-lyon.fr/>
- **Project Partners:** (5 beneficiaries – 6 associated partners – 12 ESRs)

- Universities:



&



- Industry:



# Some 'winning features' of the projects

- reduce fragmentation on a topic of European relevance
- in line with research topics in top-down Collaborative Research Calls
- strong interaction industry-research centres-academia
- relevant university partners
- relevant industrial partners and active involvement
  - industrial PhD's (now emphasized with EID)
  - Fellows work in teams
- clearly stipulated training/ToK programme → a means, not the goal
- strong transferable skills programme via Doctoral School
- detailed recruitment policy
- management expertise of the coordinator + help from LRD, DOC, ...
- detailed fellow PhD trajectories
- '*clearly*' and '*detailed*', yet sufficient flexibility in view of Fellow's profile/training needs (PhD research is difficult to plan)

# Some 'lessons learned'

- **recruitment is key!!!**
- eligibility criteria are tight (and evolving)
- embed a management plan for solving recruitment issues
- training of the Fellow is a crucial project outcome
- consortium agreement is now mandatory – do not 'over-manage'
- 100% funding, also for industry
- initiate long-lasting relationships → follow-up projects
  - with network partners
  - with Fellows!!
- '*long and tedious*' administrative procedures (e.g. amendments)
- build up a good relationship with your REA project officer
- **recruitment is key!!!**



# Some 'lessons learned'

- Interact with other Marie Curie and other researcher mobility projects and set up joint events (training, dissemination, outreach, networking, ...)



## Marie Curie Graduate School on Vehicle Mechatronics & Dynamics

February 5-8, 2013 (Heverlee, Belgium)

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**SUPER★PANELS**



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# Some 'lessons learned'

- Be flexible
  - PhD work progress is hard/impossible to predict
  - PhD candidates might drop out
  - Possible late recruitment
  - ...
  - Be flexible and keep in mind that ***the technical program is the means to train the Fellows, not the other way round***
- **Communication at large is key!** – Outreach & Dissemination
  - Do not oversell → be realistic and use proper media
  - Open Access / Open Data / Data Management Plan

# Some 'lessons learned'

- Fellow integration
  - HR, Recruitment and Career Management Office with NCP support
  - International Admissions Office
    - Official Marie Curie mobility center recognized by the Flemish government
    - Dedicated Personnel Officers
    - Providing support on issues such as salaries, taxation, pension rights, social security, visas, work permits and health care.
  - Local host group integration
    - Fellow Mentor – former MC Fellow
    - International team solidarity
  - Leuven = international hub
    - Various language classes
    - Cultural/national 'clubs'

A screenshot of the KU Leuven website's accommodation page. The top navigation bar shows 'Studentenvoorzieningen → Accommodation'. The main heading is 'Accommodation'. Below it, a section titled 'You are looking for' lists search criteria: 'a student room (a "kot"), studio, apartment or (shared) house on the private market' and 'a residence hall -'. Under the second criterion, there are three links: 'KU Leuven Student Services residence hall', 'KU Leuven Central Services residence hall', and 'residence hall on the private market'. On the left side, there is a vertical menu with a yellow header containing an 'i' icon and the text 'Studentenvoorzieningen'. Below this, there are buttons for 'Accommodation' and 'Guesthousing'. Further down, there is a list of categories: 'Exchange students', 'Regular students', 'Visiting scholars', 'Postdoctoral fellows', 'Visiting professors', and 'Couples and families'. At the bottom, there is a section for 'Guesthousing' with a sub-heading 'Model contract Private Housing market' and a note: 'Unless you have managed to arrange permanent housing before leaving for Leuven, you need to book [guesthousing](#) for about one week.' Below the text are several small photos of various student housing buildings.

# Acknowledgements

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# Questions & Contact

- Questions ??
  
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